

=>delhis.

(FILE 'HCAPLUS' ENTERED AT 13:01:51 ON 14 MAR 2002)  
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 13:02:35 ON 14 MAR 2002  
ACT EVER/A

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L1 ( 3186)SEA FILE=REGISTRY ABB=ON 14246.1.1/RID  
L2 ( 4284)SEA FILE=REGISTRY ABB=ON 13750.2.1/RID  
L3 ( 13726)SEA FILE=REGISTRY ABB=ON 14099.3.1/RID  
L4 ( 21151)SEA FILE=REGISTRY ABB=ON L1 OR L2 OR L3  
L5 STR  
L6 77 SEA FILE=REGISTRY SUB=L4 SSS FUL L5  
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L7 17 S L6 AND NC=1  
L8 57 S L6 AND NC=2  
L9 1 S 17465-86-0  
L10 1 S 10016-20-3  
L11 1 S 7585-39-9

FILE 'HCAPLUS' ENTERED AT 13:03:52 ON 14 MAR 2002

L12 58 S L6  
L13 12 S L7  
L14 45 S L8  
L15 1 S L14 AND (AMINOOXY? OR AMINO OXY? )  
L16 6 S L14 AND DERIV?  
L17 6 S L15 OR L16  
L18 3781 S L9/D OR L10/D OR L11/D  
L19 1 S L18 AND (AMINO OXY? OR AMINOOXY? OR AMINOOXY?/AB OR AMINO OXY  
L20 17 S L19 OR L17 OR L13

FILE 'REGISTRY' ENTERED AT 13:06:27 ON 14 MAR 2002

FILE 'HCAPLUS' ENTERED AT 13:07:16 ON 14 MAR 2002

L21 300448 S NUCLEOSID? OR NUCLEOTID? OR PYRIMIDINE?  
L22 0 S L14 AND L21  
L23 218299 S (NUCLEOSID? OR NUCLEOTID? OR PYRIMIDINE?)/AB  
L24 0 S L23 AND L14

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:06:27 ON 14 MAR 2002  
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 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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STRUCTURE FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1  
 DICTIONARY FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
 for more information. See STNote 27, Searching Properties in the CAS  
 Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the  
 CAS Registry Numbers that were added to the H/Z/CA/CAplus files between  
 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches  
 during this period, either directly appended to a CAS Registry Number  
 or by qualifying an L-number with /P, may have yielded incomplete results.  
 As of 1/23/02, the situation has been resolved. Also, note that searches  
 conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files  
 incorporating CAS Registry Numbers with the P indicator between 12/27/01  
 and 1/23/02, are encouraged to re-run these strategies. Contact the  
 CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,  
 worldwide, or send an e-mail to [help@cas.org](mailto:help@cas.org) for further assistance or to  
 receive a credit for any duplicate searches.

=> d que 16;d his 18

L1 ( 3186)SEA FILE=REGISTRY ABB=ON 14246.1.1/RID  
 L2 ( 4284)SEA FILE=REGISTRY ABB=ON 13750.2.1/RID  
 L3 ( 13726)SEA FILE=REGISTRY ABB=ON 14099.3.1/RID  
 L4 ( 21151)SEA FILE=REGISTRY ABB=ON L1 OR L2 OR L3  
 L5 STR

*} includes  $\alpha$ ,  $\beta$ ,  $\gamma$   
 cyclodextrins*

O—N  
 1 2

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 2

STEREO ATTRIBUTES: NONE

L6 77 SEA FILE=REGISTRY SUB=L4 SSS FUL L5

=> d his 17

(FILE 'REGISTRY' ENTERED AT 13:02:35 ON 14 MAR 2002)

L7

17 S L6 AND NC=1

*cyclodex with 1 component*

=> d his 18

(FILE 'REGISTRY' ENTERED AT 13:02:35 ON 14 MAR 2002)

L8

57 S L6 AND NC=2

*CD's with 2 components*

=> d que 19;d 19

L9

1 SEA FILE=REGISTRY ABB=ON 17465-86-0

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 17465-86-0 REGISTRY

CN .gamma.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,4,7,9,12,14,17,19,22,24,27,29,32,34,37,39-Hexadecaoxanonacyclo[36.2.2.23  
,6.28,11.213,16.218,21.223,26.228,31.233,36]hexapentacontane,  
.gamma.-cyclodextrin deriv.

OTHER NAMES:

CN .gamma.-Dextrin

CN Cyclomaltooctaose

CN Cyclooctaamylose

CN Dexy Pearl .gamma.-100

CN Ringdex C

CN Stereoisomer of 5,10,15,20,25,30,35,40-octakis(hydroxymethyl)-  
2,4,7,9,12,14,17,19,22,24,27,29,32,34,37,39-hexadecaoxanonacyclo[36.2.2.23  
,6.28,11.213,16.218,21.223,26.228,31.233,36]hexapentacontane-  
41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56-hexadecol

DR 216309-81-8, 217487-02-0

MF C48 H80 O40

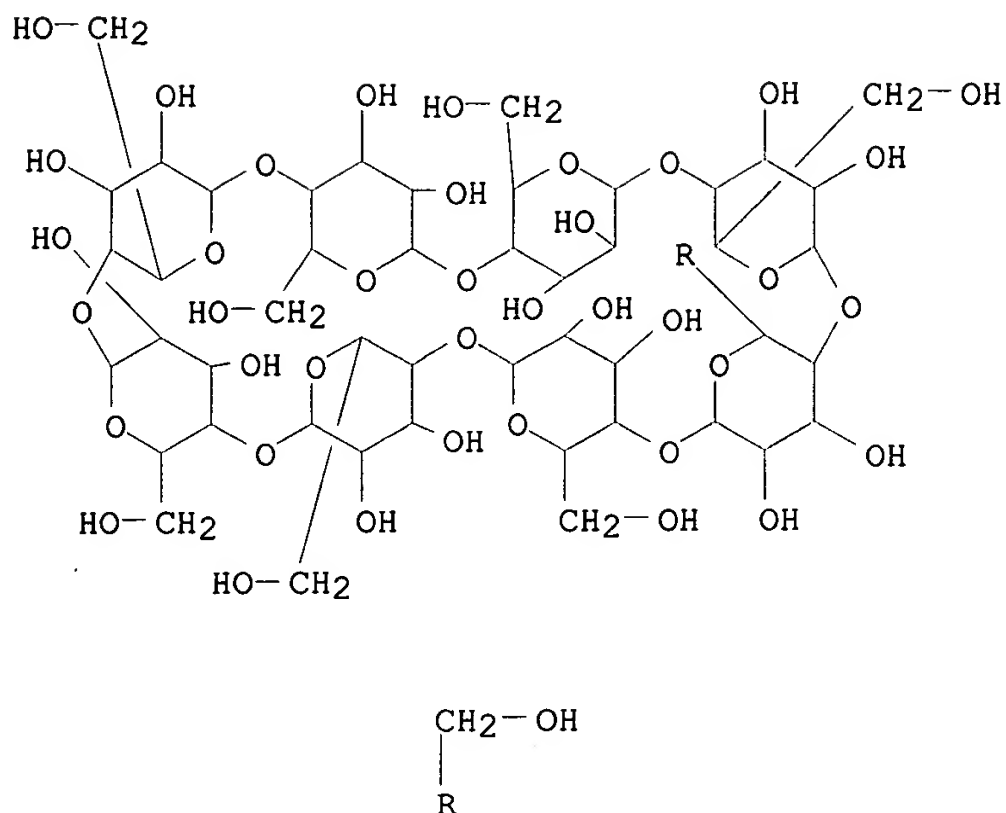
CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB, DDFU, DETHERM\*, DIOGENES,  
DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS,  
PHAR, PIRA, PROMT, TOXCENTER, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2830 REFERENCES IN FILE CA (1967 TO DATE)  
 623 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 2840 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d que 110; d 110

L10 1 SEA FILE=REGISTRY ABB=ON 10016-20-3

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 10016-20-3 REGISTRY

CN ~~alpha~~alpha-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,4,7,9,12,14,17,19,22,24,27,29-Dodecaoxaheptacyclo[26.2.2.23,6.28,11.213,16.218,21.223,26]dotetracontane, .alpha.-cyclodextrin deriv.

CN Cyclohexaamylose (6CI)

OTHER NAMES:

CN .alpha.-Cycloamylose

CN .alpha.-Dextrin

CN .alpha.-Schardinger dextrin

CN Alfadex

CN Celdex A 100

CN Cyclohexadextrin

CN Cyclomaltohexaose

CN Cyclomaltohexose

CN Dextrin, .alpha.-cyclo

CN Dexy Pearl .alpha.-100

CN Ringdex A

CN Stereoisomer of 5,10,15,20,25,30-hexakis(hydroxymethyl)-  
 2,4,7,9,12,14,17,19,22,24,27,29-dodecaoxaheptacyclo[26.2.2.23,6.28,11.213,

16.218,21.223,26]dotetracontane-31,32,33,34,35,36,37,38,39,40,41,42-dodecol

FS STEREOSEARCH

DR 23513-50-0, 41871-62-9, 47910-04-3

MF C36 H60 O30

CI COM

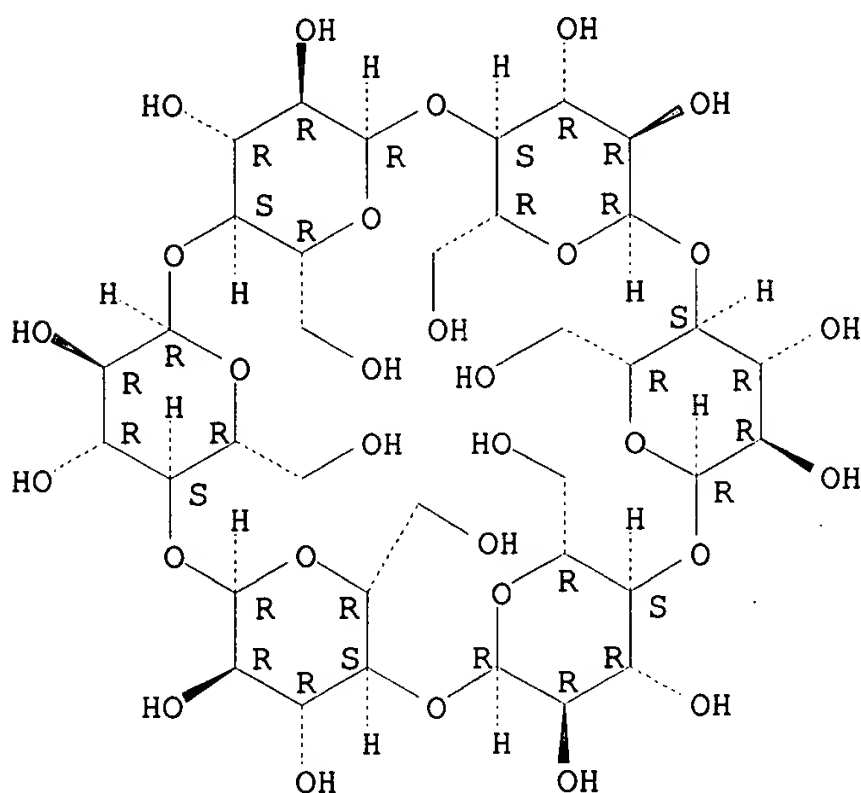
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, USAN, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3685 REFERENCES IN FILE CA (1967 TO DATE)

733 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3695 REFERENCES IN FILE CAPLUS (1967 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d que 111;d 111

L11 1 SEA FILE=REGISTRY ABB=ON 7585-39-9

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

RN 7585-39-9 REGISTRY

CN .beta.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,4,7,9,12,14,17,19,22,24,27,29,32,34-Tetradecaoxaoctacyclo[31.2.2.23,6.28,11.213,16.218,21.223,26.228,31]nonatetracontane, .beta.-cyclodextrin deriv.

CN Cycloheptaamylose (7CI)

OTHER NAMES:

CN .beta.-Cycloamylose

CN .beta.-Cycloheptaamylose

CN .beta.-Dextrin

CN Betadex

CN Cavamax W 7

CN Celdex B 100

CN Celdex N

CN Cycloheptaglucan

CN Cycloheptaglucosan

CN Cyclomaltoheptaose

CN Dextrin, .beta.-cyclo

CN Kleptose

CN Kleptose B

CN NSC 314334

CN Rhodocap N

CN Ringdex B

CN Ringdex BL

CN Schardinger .beta.-dextrin

CN Stereoisomer of 5,10,15,20,25,30,35-heptakis(hydroxymethyl)-2,4,7,9,12,14,17,19,22,24,27,29,32,34-tetradecaoxaoctacyclo[31.2.2.23,6.28,11.213,16.218,21.223,26.228,31]nonatetracontane-36,37,38,39,40,41,42,43,44,45,46,47,48,49-tetradecol

FS STEREOSEARCH

DR 37331-89-8, 47918-72-9

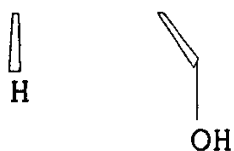
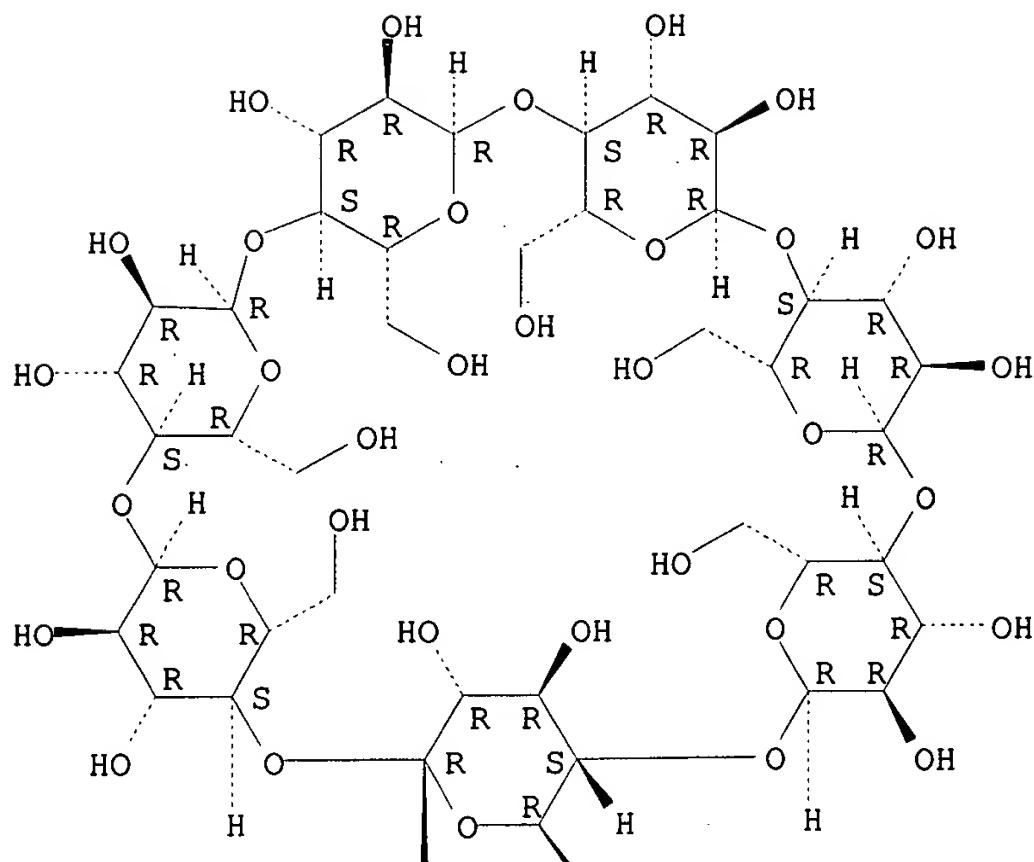
MF C42 H70 O35

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSChem, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDb, IPA, MEDLINE, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL, VETU, VTB  
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9468 REFERENCES IN FILE CA (1967 TO DATE)  
 3461 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 9553 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 13:07:16 ON 14 MAR 2002

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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11  
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information. 'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d his l12-

(FILE 'HCAPLUS' ENTERED AT 13:03:52 ON 14 MAR 2002)

L12 58 S L6  
L13 12 S L7  
L14 45 S L8  
L15 1 S L14 AND (AMINOXY? OR AMINO OXY? )  
L16 6 S L14 AND DERIV?  
L17 6 S L15 OR L16  
L18 3781 S L9/D OR L10/D OR L11/D  
L19 1 S L18 AND (AMINO OXY? OR AMINOXY? OR AMINOXY?/AB OR AMINO OXY  
L20 17 S L19 OR L17 OR L13

FILE 'REGISTRY' ENTERED AT 13:06:27 ON 14 MAR 2002

FILE 'HCAPLUS' ENTERED AT 13:07:16 ON 14 MAR 2002

=> d .ca hitstr l20 1-17

L20 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2000:461510 HCAPLUS  
DOCUMENT NUMBER: 133:171413  
TITLE: Synthesis of .beta.-cyclodextrin and glucoside compounds-bonded porphyrins and metal porphyrins  
AUTHOR(S): Li, Zao-Ying; Li, Cong; Li, Li; Wang, Tie-Feng  
CORPORATE SOURCE: Department of Chemistry, Northwest University, Xi'an, 710069, Peop. Rep. China  
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (2000), 21(6), 840-843  
CODEN: KTHPDM; ISSN: 0251-0790  
PUBLISHER: Gaodeng Jiaoyu Chubanshe  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB The reaction of mono-6-hydroxy permethylated .beta.-cyclodextrin (PM .beta.-CD-CH<sub>2</sub>OH) with trifluoromethanesulfuric anhydride under N<sub>2</sub> gave mono-6-trifluoromethanesulfonate permethylated .beta.-cyclodextrin (6). Compd. 6 reacted with nickel porphyrin [Ni(TPNH<sub>2</sub>P)] (2, H<sub>2</sub>TPNH<sub>2</sub>P = 5-(p-aminophenyl)-10,15,20-triphenylporphyrin) or [Ru(CO)(TPNH<sub>2</sub>P)] (3) to



produce .beta.-cyclodextrin linked metalloporphyrins 7 and 8. 2,3,4,6-Tetra-O-acetyl-.alpha.-D-glucopyranosyl bromide (4) and 2,3,5-tri-O-acetyl-.beta.-D-ribofuranosyl bromide (5) underwent condensation reactions with H<sub>2</sub>TPNH<sub>2</sub>P (1) to afford porphyrin-glucopyranosyl and -ribofuranosyl derivs. 9 and 10, resp. The new compds. 6-10 were identified by IR, UV-visible, <sup>1</sup>H NMR, elemental anal., and also ESI-MS for compd. 6.

CC 78-7 (Inorganic Chemicals and Reactions)

Section cross-reference(s): 26, 33

IT 287971-52-2P 287971-54-4P 287971-56-6P 287971-58-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

IT 287971-52-2P 287971-54-4P

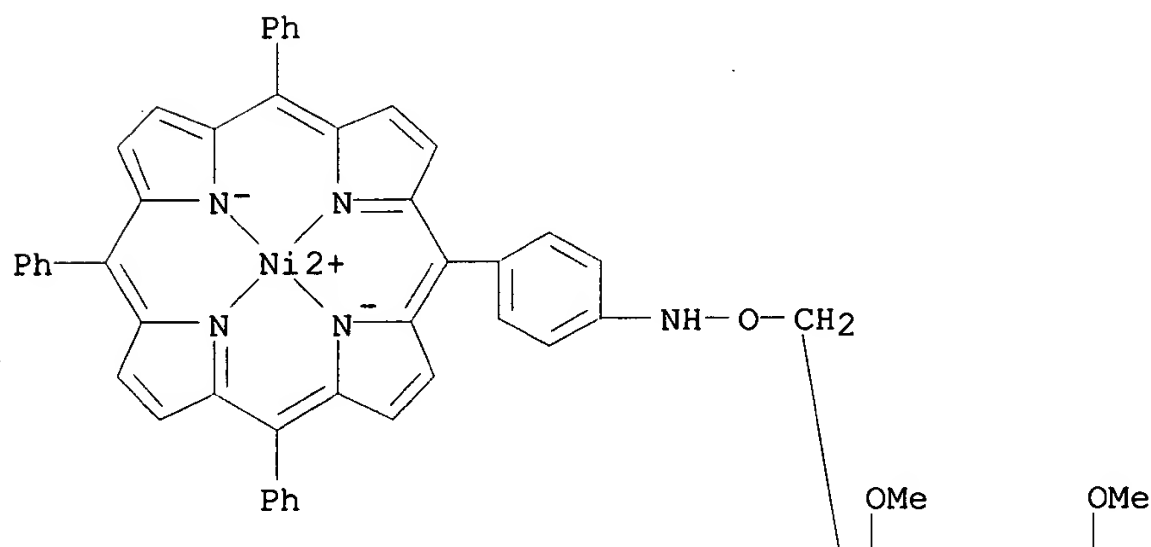
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

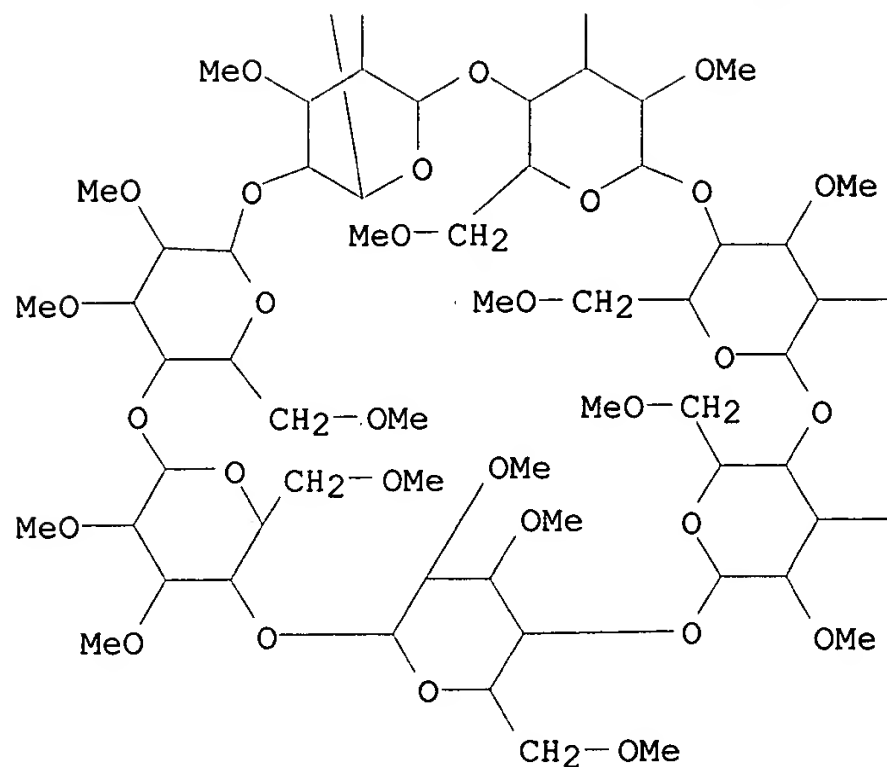
RN 287971-52-2 HCAPLUS

CN Nickel, [2A,2B,2C,2D,2E,2F,2G,3A,3B,3C,3D,3E,3F,3G,6A,6B,6C,6D,6E,6F-eicosa-.kappa.O-methyl-6G-O-[[4-(10,15,20-triphenyl-21H,23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]amino]-.beta.-cyclodextrinato(2-)]-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



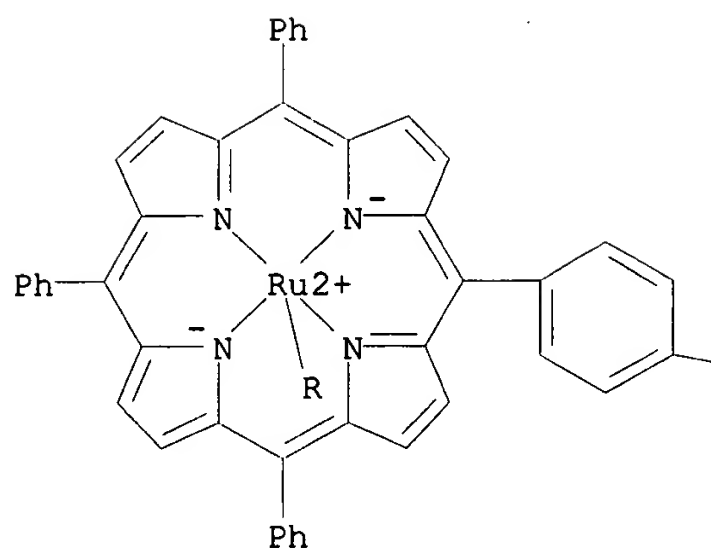
PAGE 2-B

— OMe

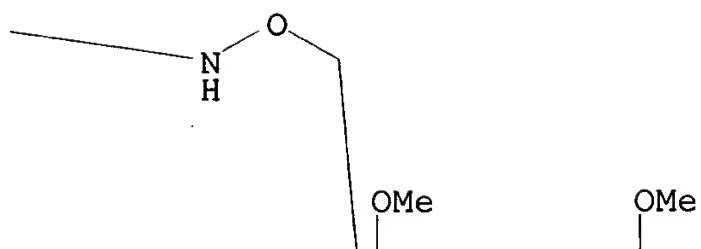
— OMe

RN 287971-54-4 HCAPLUS  
 CN Ruthenium, carbonyl[2A, 2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6A, 6B, 6C, 6D, 6E, 6F-eicosa-.kappa.O-methyl-6G-O-[[4-(10, 15, 20-triphenyl-21H, 23H-porphin-5-yl-.kappa.N21,.kappa.N22,.kappa.N23,.kappa.N24)phenyl]amino]-.beta.-cyclodextrinato(2-)]-, (SP-5-52)-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

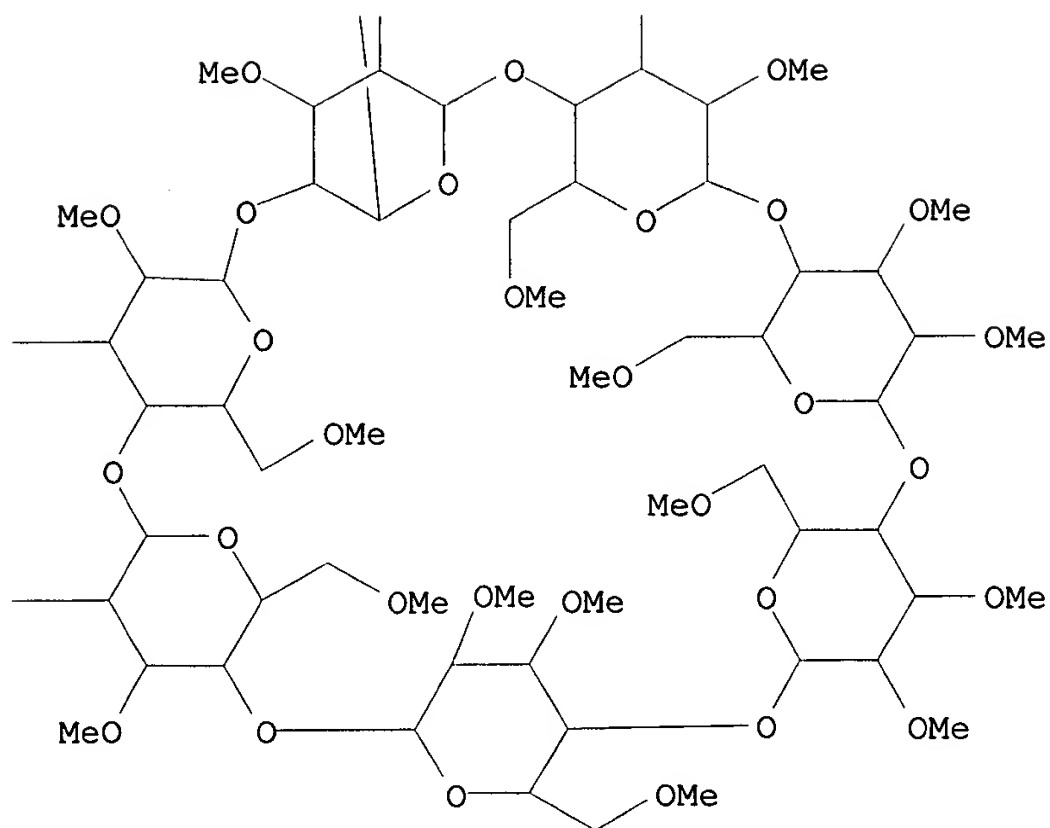


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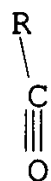
MeO—

MeO—

PAGE 2-B



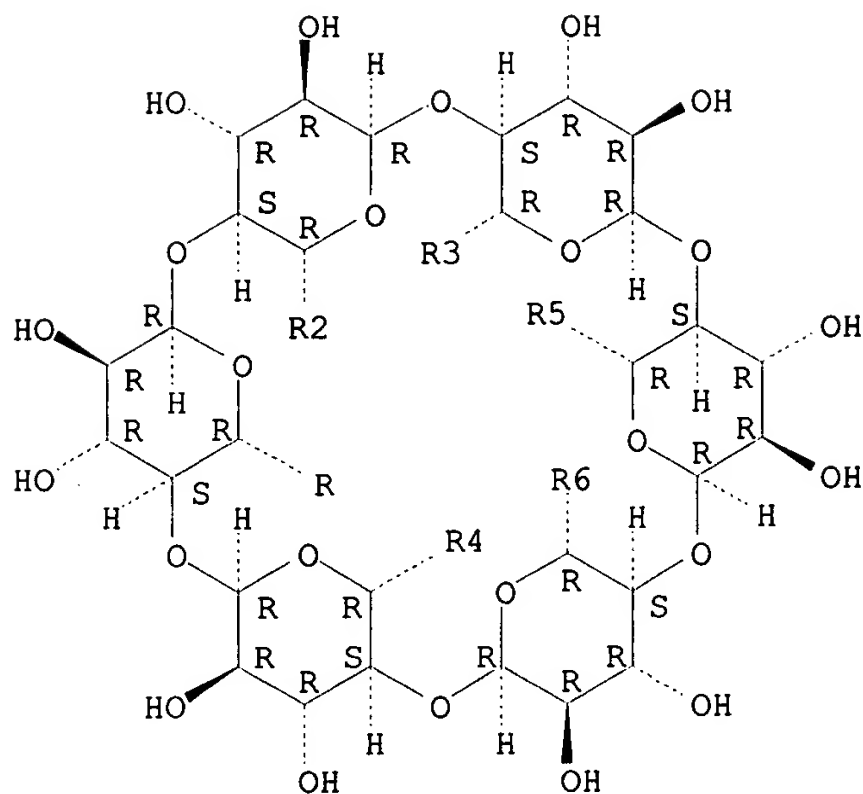
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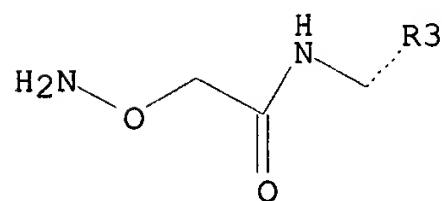
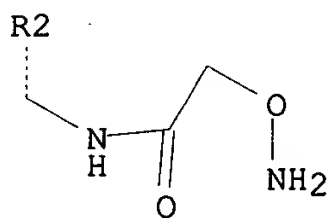
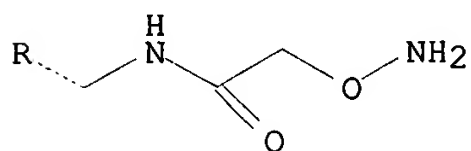
DOCUMENT NUMBER: 133:164300  
 TITLE: Synthesis and pharmacological properties of an .alpha.-cyclodextrin assembled neuropeptide Y fragment  
 AUTHOR(S): Yokokawa, Yoshihiro; Grouzmann, Eric; Bourgeois, Jean-Pascal; Eggleston, Ian; Dumy, Pascal; Tuchscherer, Gabriele; Mutter, Manfred  
 CORPORATE SOURCE: Pharmaco Science Research Laboratories, Shiseido Co., Ltd., Yokohama, 223, Japan  
 SOURCE: Peptides 1998, Proceedings of the European Peptide Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999), Meeting Date 1998, 322-323. Editor(s): Bajusz, Sandor; Hudecz, Ferenc. Akademiai Kiado: Budapest, Hung.  
 CODEN: 68WKAY  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB A symposium report. We report on the synthesis of TASP (template assembled synthetic proteins) mols. able to bind to neurotensin Y and angiotensin II receptors, in which .alpha.-cyclodextrin is used as template.  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 33  
 IT 52530-60-6P **287962-52-1P**  
 RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and pharmacol. properties of .alpha.-cyclodextrin assembled neuropeptide Y fragment)  
 IT **287962-52-1P**  
 RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and pharmacol. properties of .alpha.-cyclodextrin assembled neuropeptide Y fragment)  
 RN 287962-52-1 HCAPLUS  
 CN .alpha.-Cyclodextrin, 6A,6B,6C,6D,6E,6F-hexakis[[(aminooxy)acetyl]amino]-6A,6B,6C,6D,6E,6F-hexadeoxy- (9CI) (CA INDEX NAME)

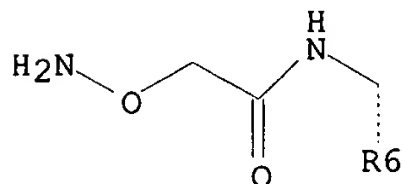
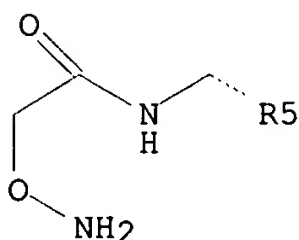
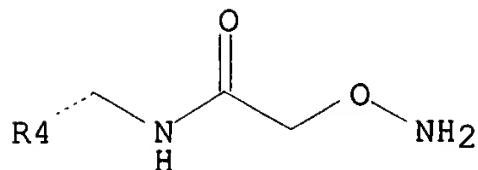
Absolute stereochemistry.

PAGE 1-A



PAGE 2-A





REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:576949 HCAPLUS

DOCUMENT NUMBER: 131:215795

TITLE: Preparation of **aminoxy derivatives** of cyclodextrins

INVENTOR(S): Khomutov, Alexei Radievich; Yakovlev, Dmitry Yurievich; Khomutov, Radii Mikhailovich; Korpela, Timo

PATENT ASSIGNEE(S): Russia

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9945032	A1	19990910	WO 1999-FI167	19990304
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
FI 9800489	A	19990905	FI 1998-489	19980304
AU 9926279	A1	19990920	AU 1999-26279	19990304
EP 1090041	A1	20010411	EP 1999-906292	19990304
R:	DE, DK, ES, FR, GB, IT, NL, SE, FI			

## PRIORITY APPLN. INFO.:

FI 1998-489      A 19980304  
 WO 1999-FI167    W 19990304

OTHER SOURCE(S):      MARPAT 131:215795

AB The title derivs. CD-(X-Y-ONH<sub>2</sub>)<sub>n</sub> (CD = mono- or polydeoxy .alpha.-, .beta.-, or .gamma.-cyclodextrin, carrying in its 6-, 3- and/or 2-position a group contg. **aminooxy** group, and optionally carrying substituents different from X-Y-ONH<sub>2</sub>; Y = linker group between **aminooxy** group and mono- or polydeoxy-CD group; X = functional group or an atom necessary to connect Y and the deoxy CD group, or Y = direct bond when X = direct bond; n .gtoreq.1 but .ltoreq.24, 21, and 18, for .alpha.-, .beta.- and .gamma.-cyclodextrin, resp.) and the protected **aminooxy** derivs. thereof, such as acetoxime of mono-6-(2-**aminooxyethyl**)thio-6-deoxy-.beta.-cyclodextrin, are prepd.

IC ICM C08B037-16

ICS A61K047-40

CC 44-6 (Industrial Carbohydrates)

ST **aminooxy deriv** cyclodextrin; **aminooxyethylthio**  
deoxycyclodextrin acetoxime

IT 242150-88-5P 242150-91-0P 242150-92-1P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. of **aminooxy**-cyclodextrin **derivs.** and  
 protected **derivs.**)

IT 242150-89-6P 242150-90-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)  
 (prepn. of **aminooxy**-cyclodextrin **derivs.** and  
 protected **derivs.**)

IT 54-47-7, Pyridoxal-5-phosphate 67-64-1, 2-Propanone, reactions

574-25-4, 6-Mercaptopurine riboside 591-28-6, 4-Thiouracil

7585-39-9D, .beta.-Cyclodextrin, **aminooxy**-substituted

alk(en)yl ethers 10016-20-3D, .alpha.-Cyclodextrin,

**aminooxy**-substituted alk(en)yl ethers 17465-86-0D,.gamma.-Cyclodextrin, **aminooxy**-substituted alk(en)yl ethers

60302-08-1 60302-09-2 67217-55-4, Mono-6-O-tosyl-.beta.-cyclodextrin

112174-48-8 242150-87-4

RL: RCT (Reactant)

(prepn. of **aminooxy**-cyclodextrin **derivs.** and  
 protected **derivs.**)

IT 242150-88-5P 242150-91-0P 242150-92-1P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. of **aminooxy**-cyclodextrin **derivs.** and  
 protected **derivs.**)

RN 242150-88-5 HCAPLUS

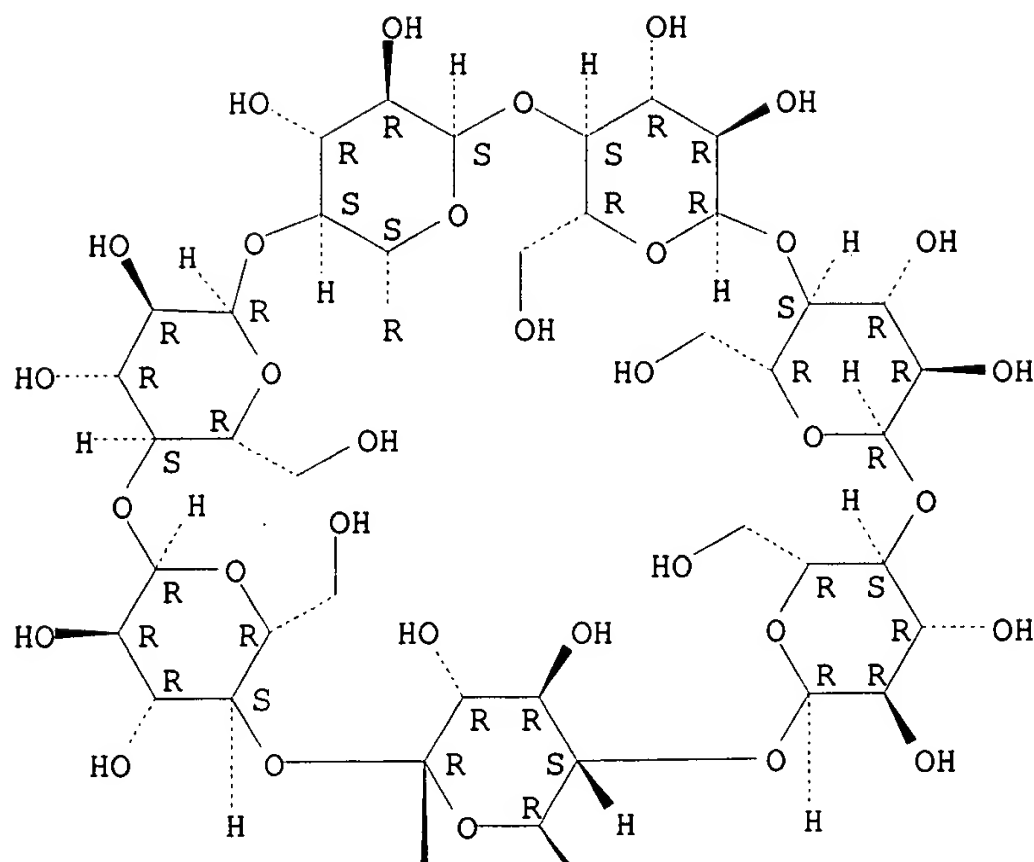
CN .beta.-Cyclodextrin, 6A-S-[2-[[[(1-ethoxyethylidene)amino]oxy]ethyl]-6A-  
 thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

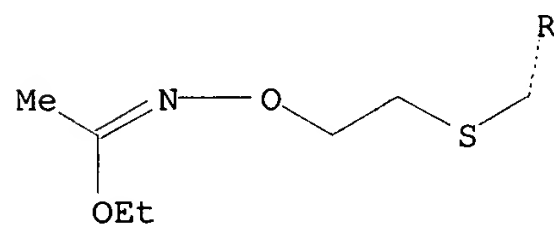
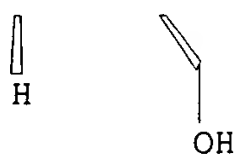
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PAGE 1-A

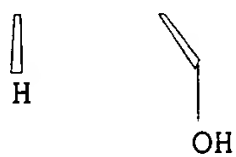
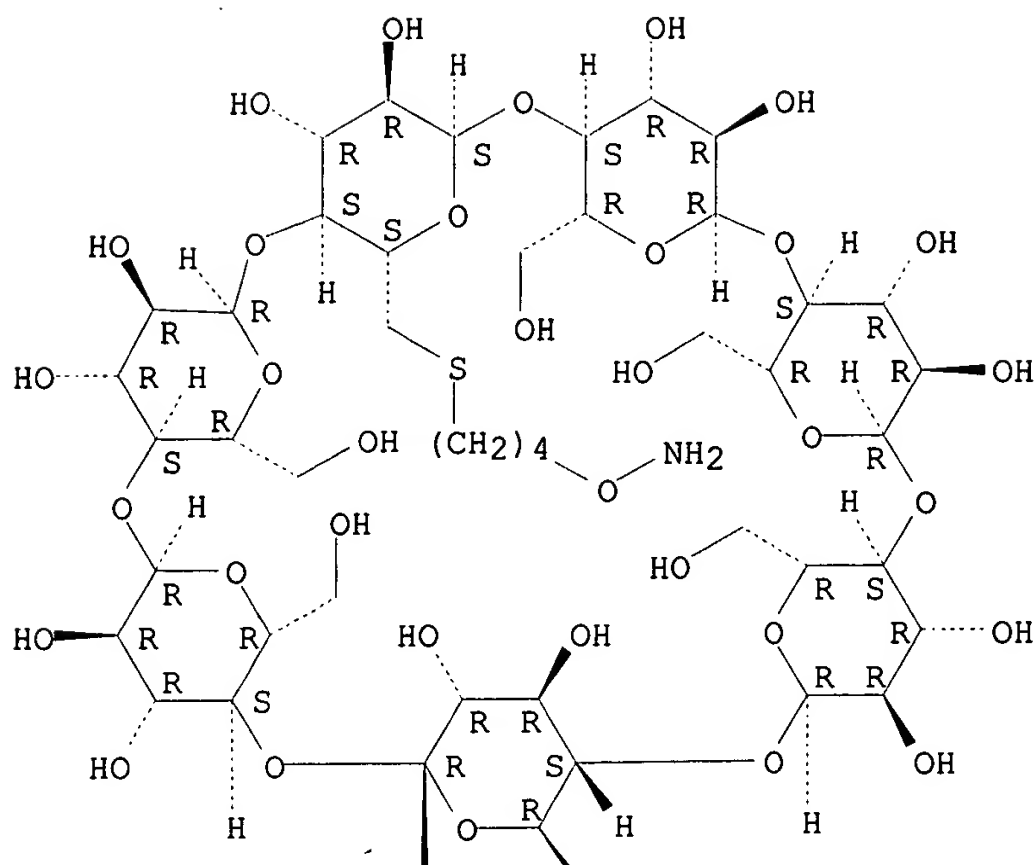


PAGE 2-A



RN 242150-91-0 HCAPLUS  
 CN .beta.-Cyclodextrin, 6A-S-[4-(aminooxy)butyl]-6A-thio-, hydrochloride  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

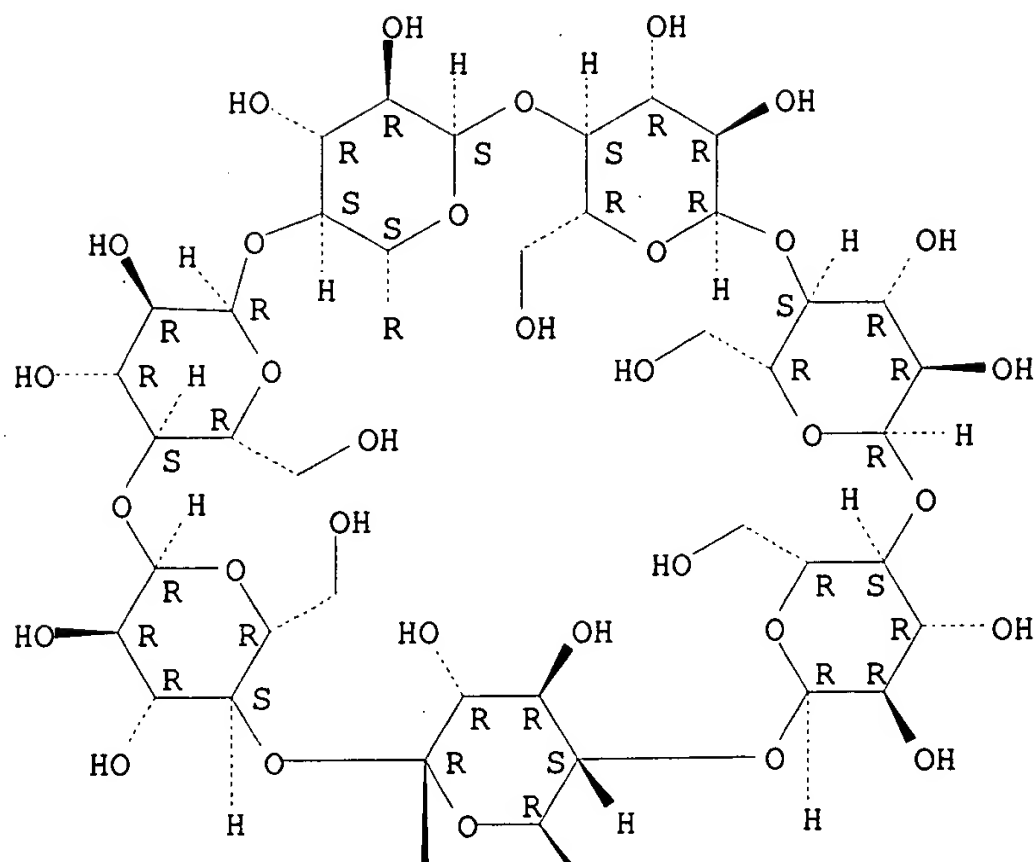


● HCl

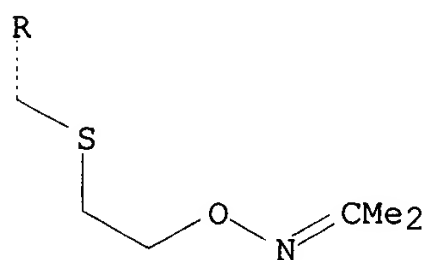
RN 242150-92-1 HCAPLUS  
 CN .beta.-Cyclodextrin, 6A-S-[2-[[[(1-methylethylidene)amino]oxy]ethyl]-6A-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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IT 242150-89-6P 242150-90-9P

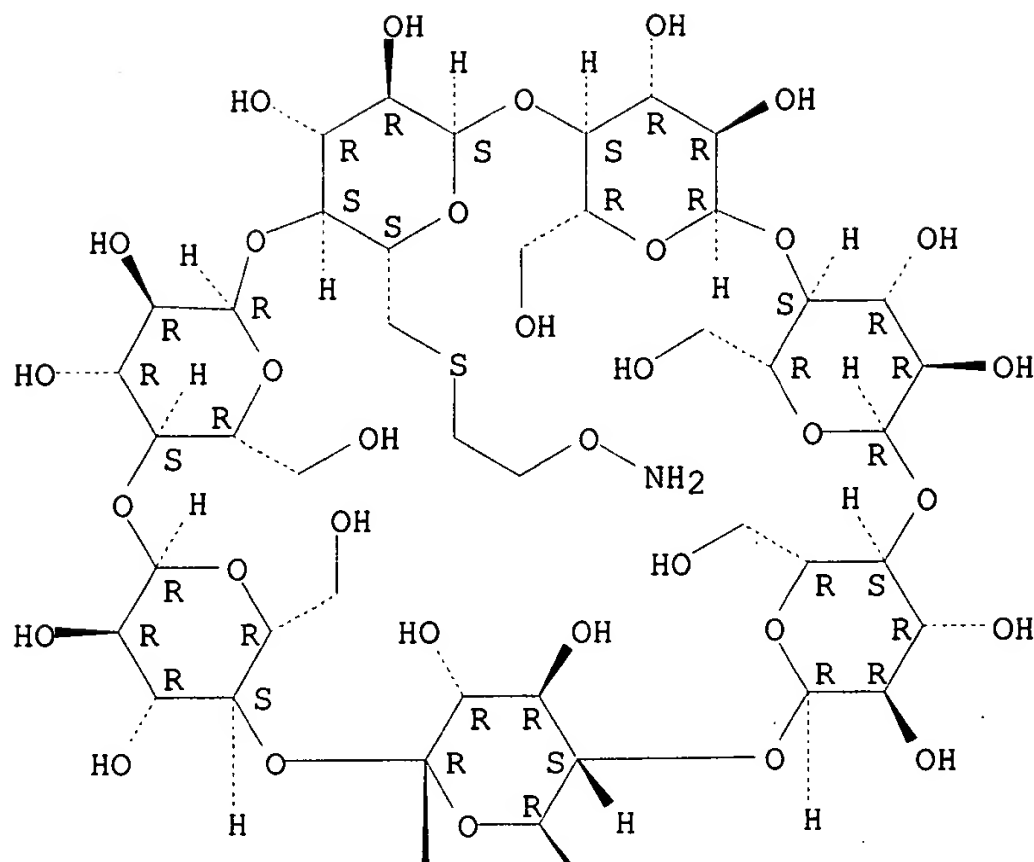
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)  
 (prepn. of **aminoxycyclodextrin derivs.** and  
 protected **derivs.**)

RN 242150-89-6 HCAPLUS

CN .beta.-Cyclodextrin, 6A-S-[2-(aminoxyl)ethyl]-6A-thio-, hydrochloride  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



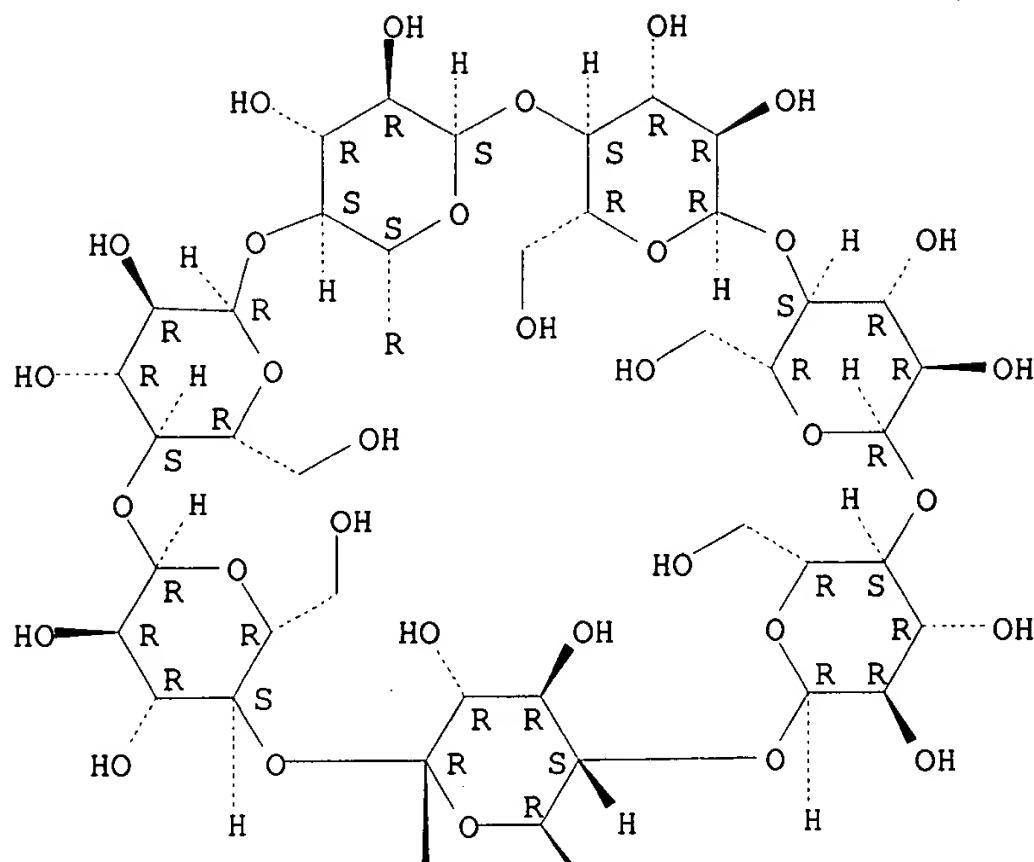
● HCl

RN 242150-90-9 HCAPLUS

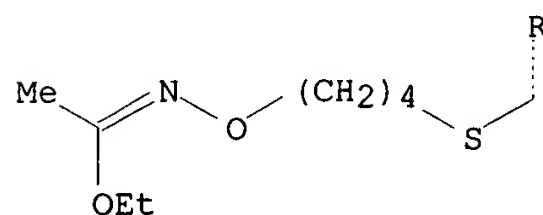
CN .beta.-Cyclodextrin, 6A-S-[4-[[[(1-ethoxyethylidene)amino]oxy]butyl]-6A-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

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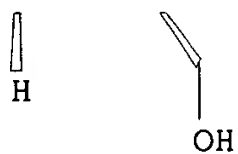
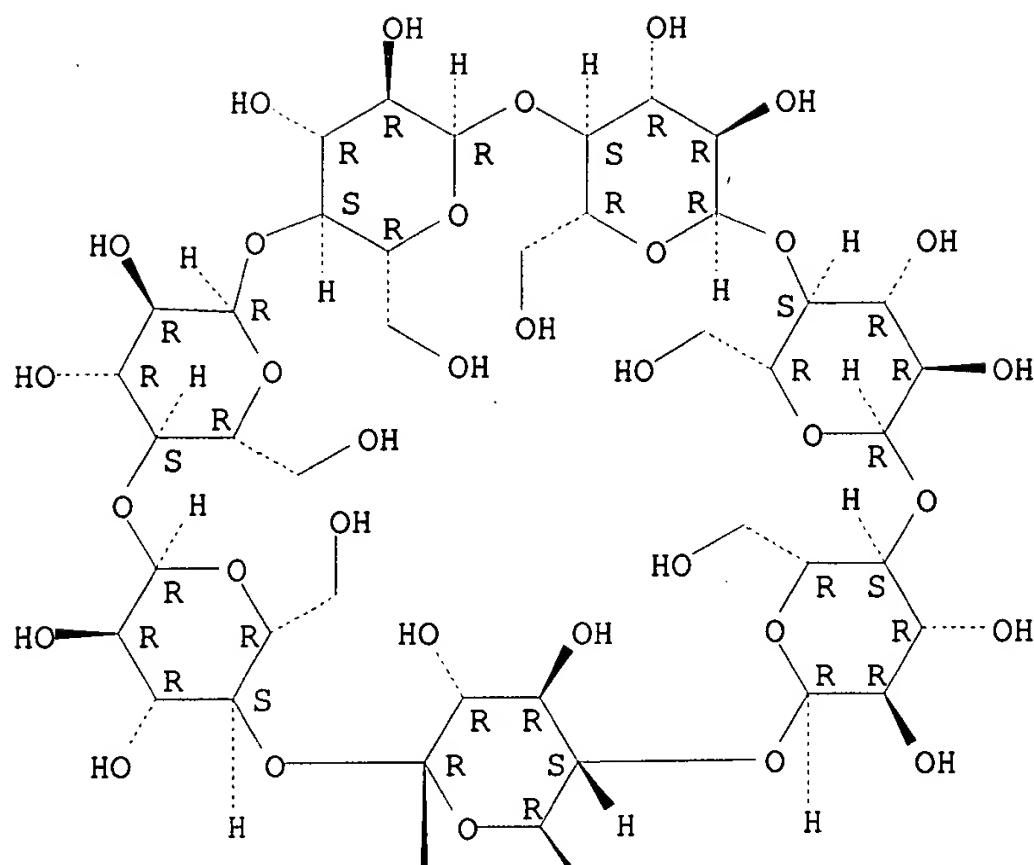


PAGE 2-A

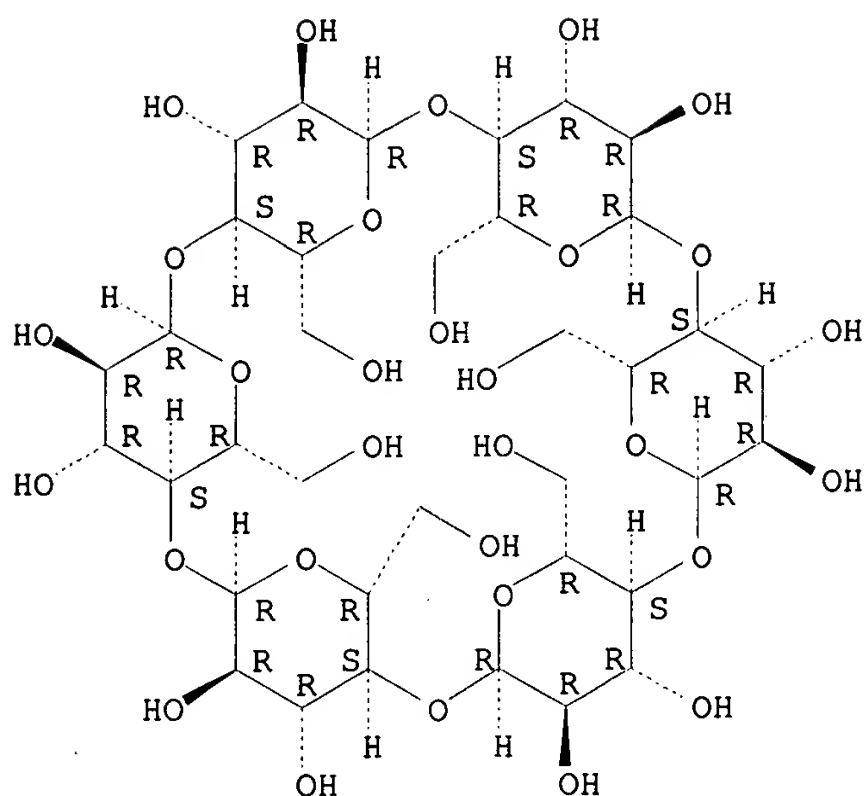


IT 7585-39-9D, .beta.-Cyclodextrin, **aminoxy**-substituted  
 alk(en)yl ethers 10016-20-3D, .alpha.-Cyclodextrin,  
**aminoxy**-substituted alk(en)yl ethers 17465-86-0D,  
 .gamma.-Cyclodextrin, **aminoxy**-substituted alk(en)yl ethers  
 RL: RCT (Reactant)  
 (prepn. of **aminoxy**-cyclodextrin **derivs.** and  
 protected **derivs.**)  
 RN 7585-39-9 HCAPLUS  
 CN .beta.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

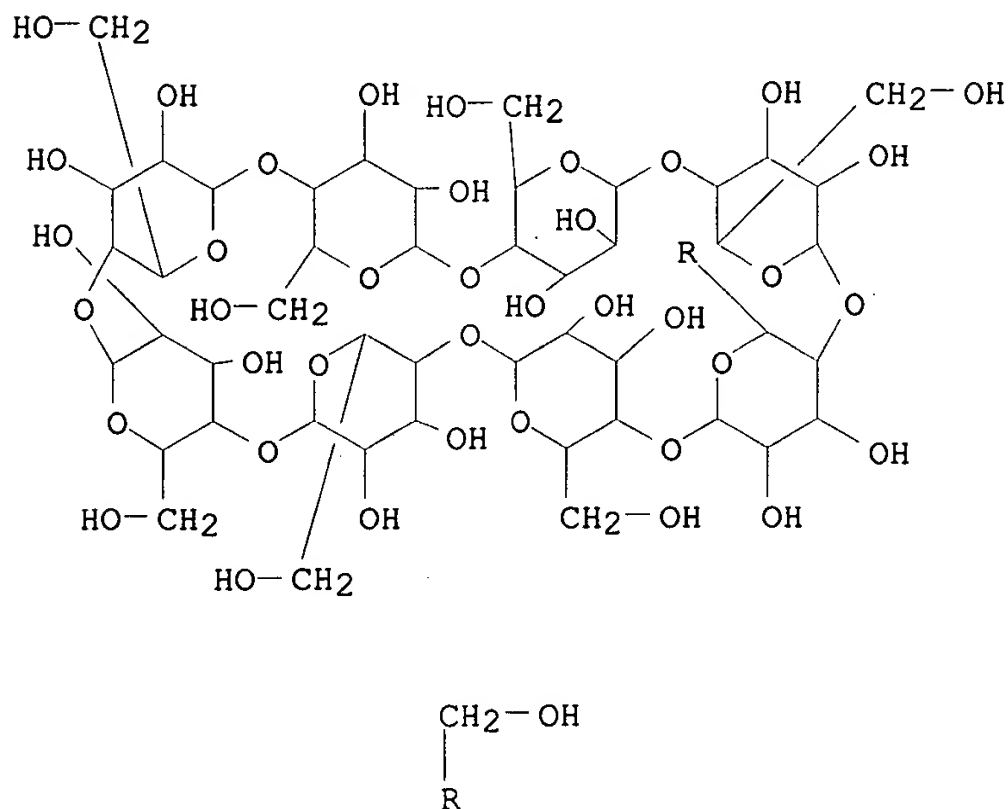
Absolute stereochemistry.



RN 10016-20-3 HCAPLUS  
 CN .alpha.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)  
 Absolute stereochemistry.



RN 17465-86-0 HCAPLUS  
 CN .gamma.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:295973 HCAPLUS  
 DOCUMENT NUMBER: 131:15633  
 TITLE: Burst kinetics and turnover in an esterase mimic  
 AUTHOR(S): Breslow, Ronald; Nesnas, Nasri

CORPORATE SOURCE: Department of Chemistry, Columbia University, New York, NY, 10027, USA

SOURCE: Tetrahedron Lett. (1999), 40(17), 3335-3338  
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A catalyst combining a cyclodextrin binding group with a bound zinc cation and an oxime anion cleaves bound esters in a two step process. The hydrolysis kinetics of p-nitrophenyl acetate and p-tert-butylphenyl acetate were studied using the zinc catalyst. The zinc complex catalyst was shown work faster than analogous nickel(II) or copper(II) complexes and zinc bound to the cyclodextrin with the oxime functional group on the secondary face is preferred over that bound to the primary face.

CC 7-4 (Enzymes)  
Section cross-reference(s): 22, 33, 67

IT **226421-11-0**  
RL: BSU (Biological study, unclassified); CAT (Catalyst use); RCT (Reactant); BIOL (Biological study); USES (Uses)  
(procatalyst for zinc cyclodextrin oximato deriv. complex esterase mimic)

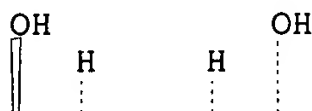
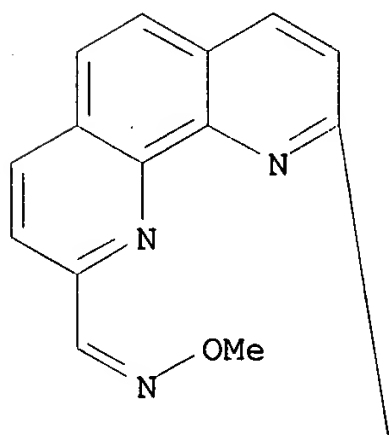
IT **226421-11-0**  
RL: BSU (Biological study, unclassified); CAT (Catalyst use); RCT (Reactant); BIOL (Biological study); USES (Uses)  
(procatalyst for zinc cyclodextrin oximato deriv. complex esterase mimic)

RN 226421-11-0 HCAPLUS

CN .beta.-Cyclodextrin, 3A-deoxy-3A-[[[9-[(methoxyimino)methyl]-1,10-phenanthrolin-2-yl]methyl]amino]- (9CI) (CA INDEX NAME)

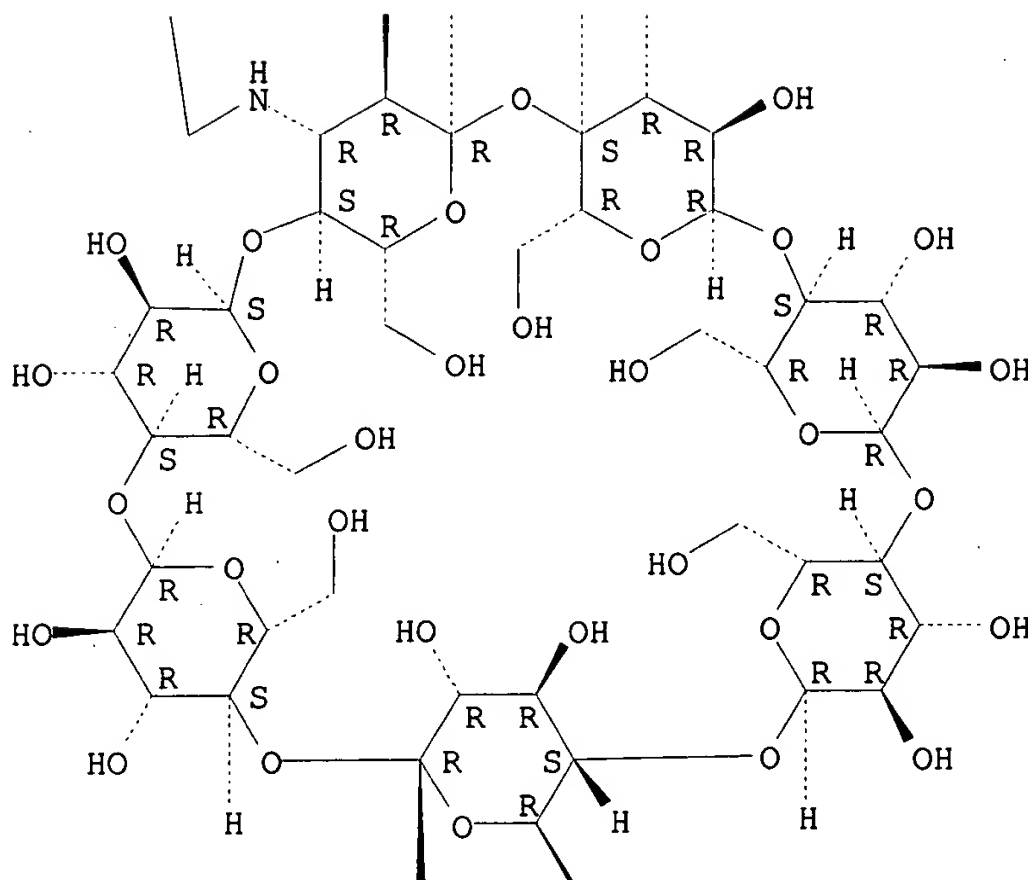
Absolute stereochemistry.  
Double bond geometry unknown.

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REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:600670 HCAPLUS

DOCUMENT NUMBER: 129:302779

TITLE: Effects of solvents on the chirality of ferrichrome-mimicking Fe<sup>3+</sup> complexes based on .alpha.-cyclodextrin

AUTHOR(S): Hori, Yuji; Tamagaki, Seizo

CORPORATE SOURCE: Dep. of Bioapplied Chemistry, Faculty of Engineering, Osaka City University, Osaka, 558-8585, Japan

SOURCE: Nippon Kagaku Kaishi (1998), (9), 602-608  
CODEN: NKAKB8; ISSN: 0369-4577

PUBLISHER: Nippon Kagakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB An .alpha.-cyclodextrin-based three-fold sym. tripodal ferrichrome mimic contg. three MeN(OH)COCH<sub>2</sub>CH<sub>2</sub>CONH side chains [I; R = NHCOCH<sub>2</sub>CH<sub>2</sub>CON(OH)Me] was designed and synthesized. The chirality of its complex with Fe<sup>3+</sup> ion

was examd. in various solvents such as water, methanol, and acetonitrile by using CD spectroscopy. The chirality varied remarkably with changing solvents. A mechanism involving hydrogen-bonding with solvent, which dets. the chirality, was proposed.

CC 33-7 (Carbohydrates)

Section cross-reference(s): 68, 78

IT 127-06-0P, Acetone oxime 622-33-3P, O-Benzylhydroxylamine 3376-36-1P  
22513-22-0P, N-Methyl-O-benzylhydroxylamine 214556-56-6P 214556-57-7P  
**214556-59-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(effects of solvents on chirality of ferrichrome-mimicking Fe<sup>3+</sup>  
complexes based on .alpha.-cyclodextrin)

IT **214556-59-9P**

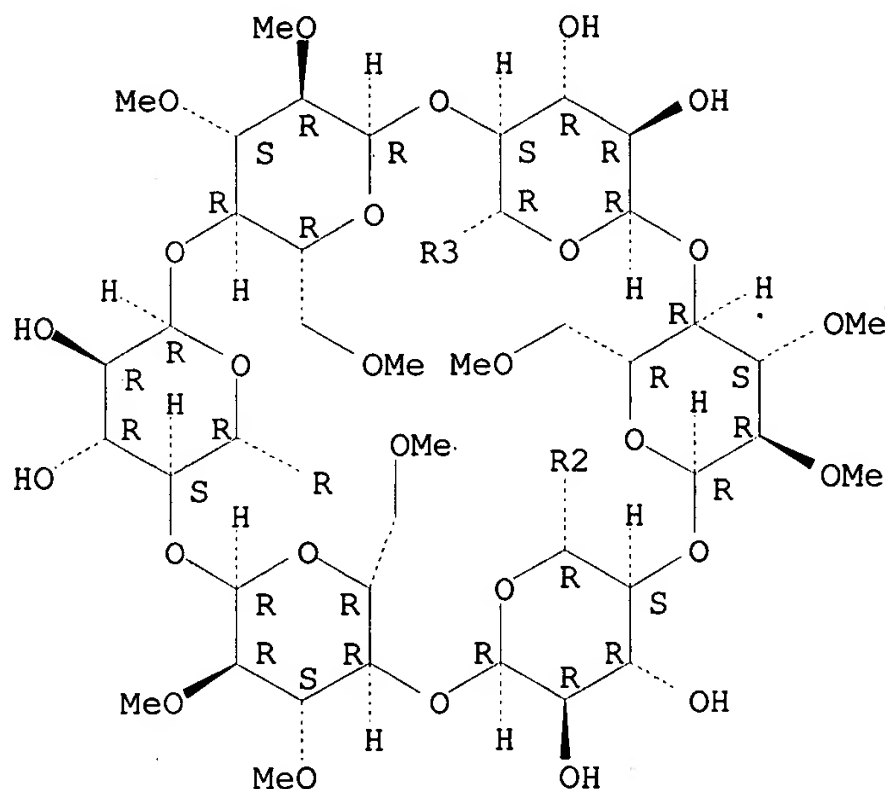
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(effects of solvents on chirality of ferrichrome-mimicking Fe<sup>3+</sup>  
complexes based on .alpha.-cyclodextrin)

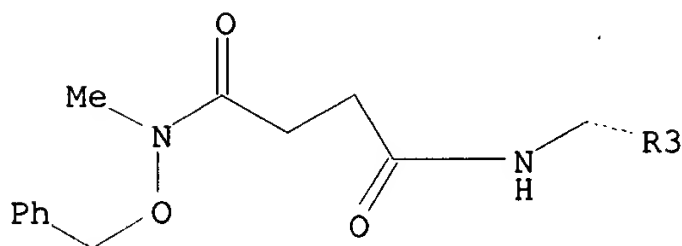
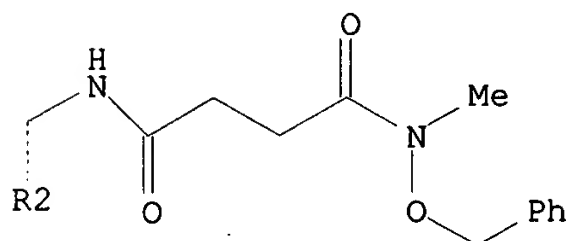
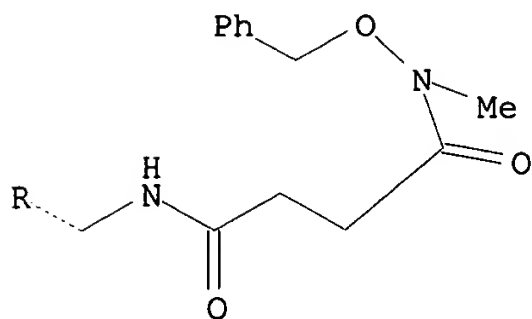
RN 214556-59-9 HCAPLUS

CN .alpha.-Cyclodextrin, 6B,6D,6F-trideoxy-2A,2C,2E,3A,3C,3E,6A,6C,6E-nona-O-methyl-6B,6D,6F-tris[[4-[methyl(phenylmethoxy)amino]-1,4-dioxobutyl]amino]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





L20 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:108750 HCAPLUS

DOCUMENT NUMBER: 126:225489

TITLE: Synthesis and biological evaluation of  
2-amino-2-deoxy- and 6-amino-6-deoxy-  
cyclomaltoheptaose polysulfates as synergists for  
angiogenesis inhibition

AUTHOR(S): Sakairi, Nobuo; Kuzuhara, Hiroyoshi; Okamoto, Taira;  
Yajima, Motoyuki

CORPORATE SOURCE: The Institute of Physical and Chemical Research  
(RIKEN), Saitama, 351-01, Japan

SOURCE: Bioorg. Med. Chem. (1996), 4(12), 2187-2192

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 2-Amino-2-deoxy-cyclomaltoheptaose was prepd. from .beta.-cyclodextrin perbenzoate [heptakis(2,3,6-tri-O-benzoyl)cyclomaltoheptaose] by a series of reactions including selective de-O-benzoylation at C-2 of one of the perbenzoylated D-glucopyranosyl moieties, oxidn. to the 2-ulose deriv., oxime formation, and redn. to the 2-amino-2-deoxy-D-glucose moiety. This compd. and 6-amino-6-deoxycyclomaltoheptaose accessible from .beta.-cyclodextrin through the known procedure were sulfated to give polysulfated aminocyclomaltoheptaoses. Employing .beta.-cyclodextrin

polysulfate as a ref. compd., the synergistic effects of title compds. for cortexolone on angiogenesis inhibitory activity were examd. by rabbit-corneal micropocket assay system. In contrast to the significant anti-angiogenesis activity of the .beta.-cyclodextrin polysulfate-cortexolone pair, neither one of title compds. showed any cooperative activity with cortexolone in the inhibition of basic FGF-induced angiogenesis.

CC 33-8 (Carbohydrates)

Section cross-reference(s): 1

IT 134308-79-5P 188262-65-9P **188262-67-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and antiangiogenesis of 2-amino-2-deoxy- and  
6-amino-6-deoxy-cyclomaltoheptaose polysulfates)

IT **188262-67-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and antiangiogenesis of 2-amino-2-deoxy- and  
6-amino-6-deoxy-cyclomaltoheptaose polysulfates)

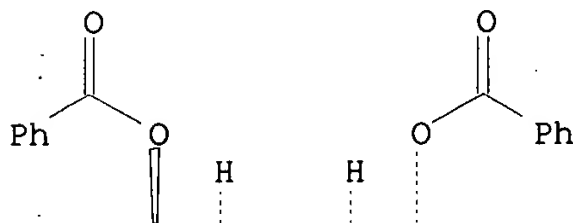
RN 188262-67-1 HCAPLUS

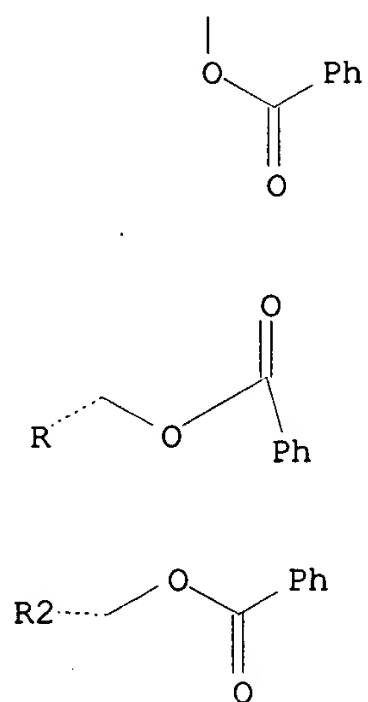
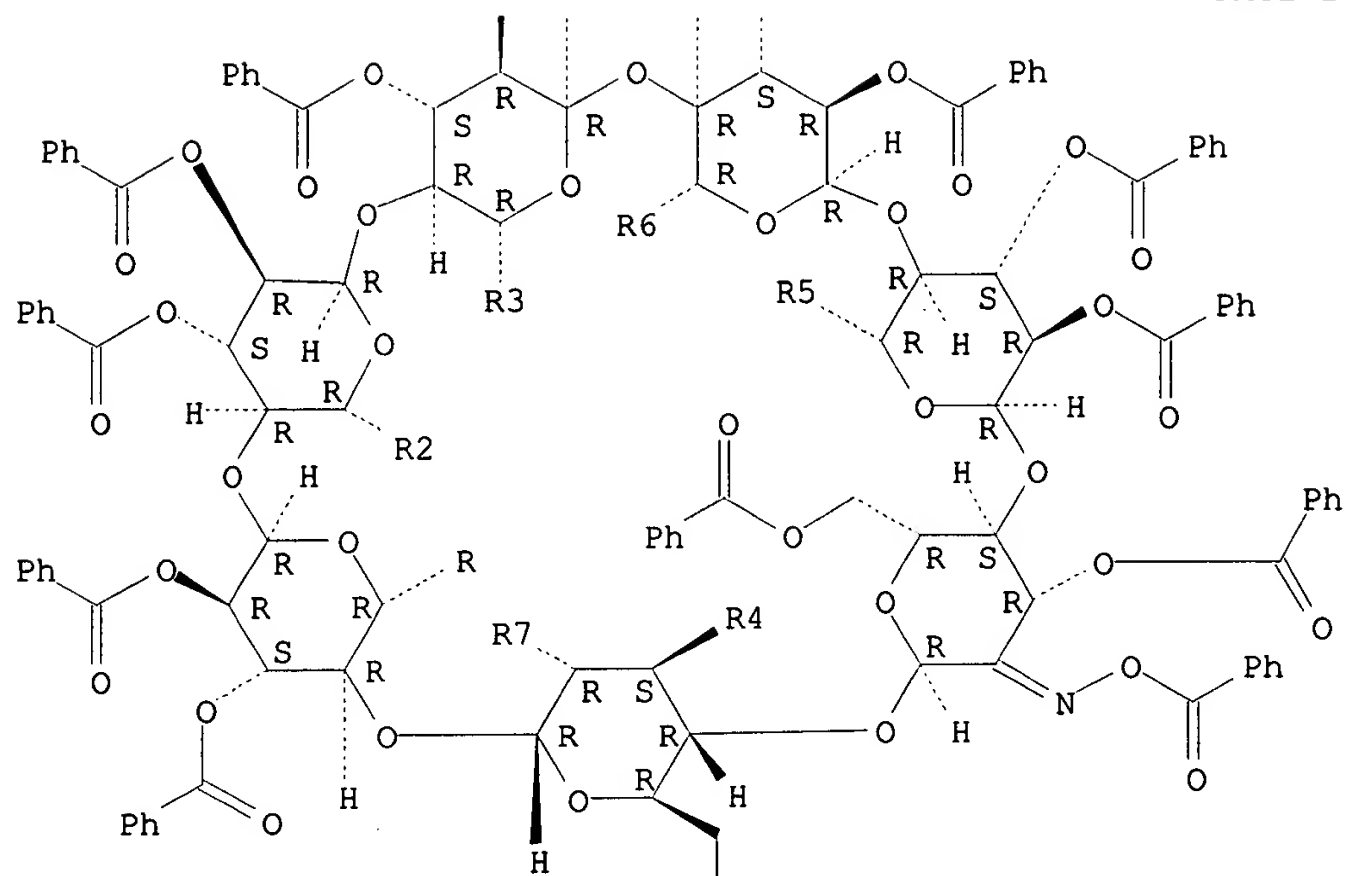
CN .beta.-Cyclodextrin, 2A-[(benzoyloxy)imino]-2A-deoxy-,  
2B, 2C, 2D, 2E, 2F, 2G, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6A, 6B, 6C, 6D, 6E, 6F, 6G-eicosabenzoate  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

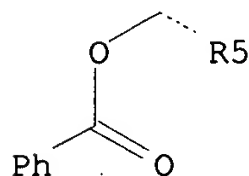
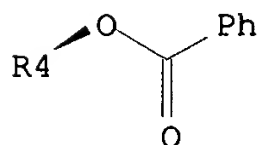
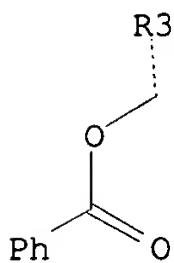
Double bond geometry unknown.

PAGE 1-A

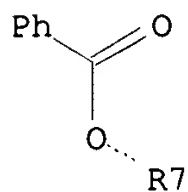
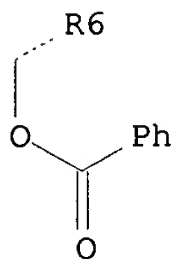




PAGE 4-A



PAGE 5-A



L20 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1995:846948 HCAPLUS  
 DOCUMENT NUMBER: 123:313193  
 TITLE: Preassociating .alpha.-Nucleophiles Based on  
 .beta.-Cyclodextrin. Their Synthesis and Reactivity  
 AUTHOR(S): Martin, Kristy A.; Mortellaro, Mark A.; Sweger, Robert  
 W.; Fikes, Lewis E.; Winn, David T.; Clary, Scott;  
 Johnson, Morgan P.; Czarnik, Anthony W.  
 CORPORATE SOURCE: Department of Chemistry, Ohio State University,  
 Columbus, OH, 43210, USA  
 SOURCE: J. Am. Chem. Soc. (1995), 117(42), 10443-8  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal

## LANGUAGE:

English

AB The authors have expanded the field of enzyme mimics based on .beta.-cyclodextrin (.beta.CD) by attaching .alpha.-nucleophiles to the primary and secondary sides of the cyclodextrin cavity. Six new materials have been prep'd. in which .beta.CD has been modified by hydrazine, hydroxylamine, oxime, and hydroperoxide functionalities. Transacylating studies with p-NPA have demonstrated that the primary-side hydroxylamine shows the highest reactivity with a 1900-fold increase in rate over .beta.CD at pH 6.5. Other .alpha.-nucleophiles show less remarkable rate increases in this system but, in some cases, demonstrate hydrogen-bonding to the cyclodextrin rim and inhibition kinetics.

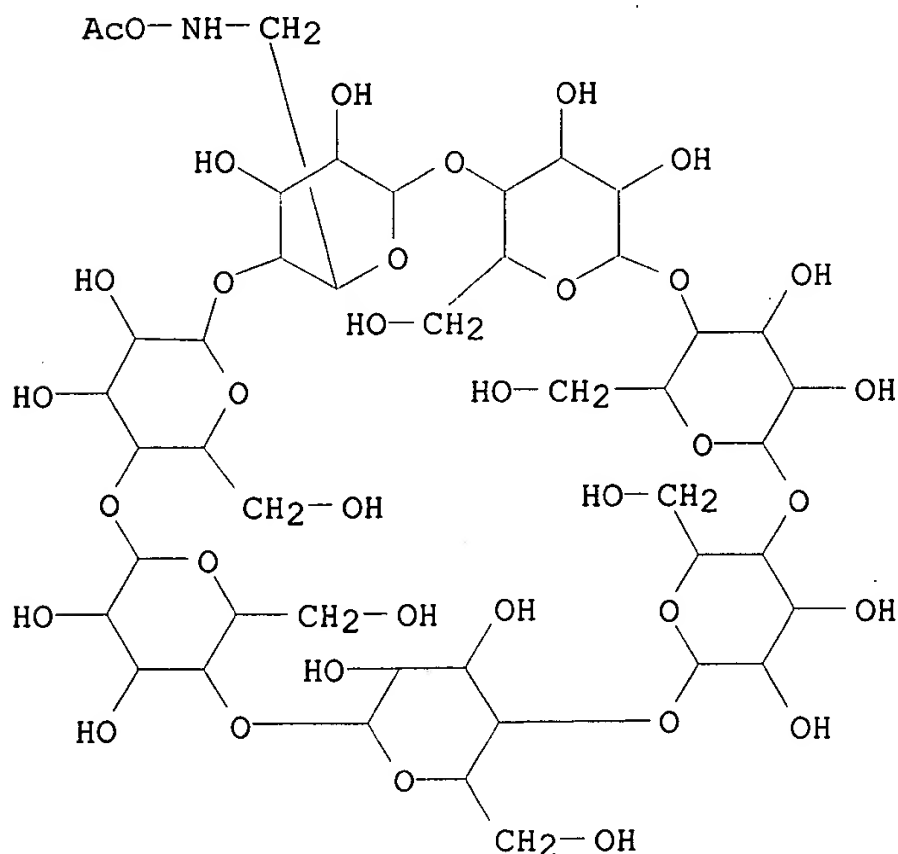
CC 22-4 (Physical Organic Chemistry)

IT **138435-34-4P** 138435-35-5P 170123-94-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (reactivity of .alpha.-nucleophiles based on cyclodextrin)

IT **138435-34-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (reactivity of .alpha.-nucleophiles based on cyclodextrin)

RN 138435-34-4 HCAPLUS

CN .beta.-Cyclodextrin, 6A-[(acetyloxy)amino]-6A-deoxy- (9CI) (CA INDEX NAME)



L20 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:502017 HCAPLUS

DOCUMENT NUMBER: 121:102017

TITLE: Insecticidal compositions containing inclusion compounds of cyclodextrin and triazole derivatives

INVENTOR(S): Ikeuchi, Toshisuke; Misumi, Juji; Goto, Minoru; Adachi, Kyoichi; Nakano, Juki

PATENT ASSIGNEE(S): Kumiai Chemical Industry Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05331012	A2	19931214	JP 1992-163612	19920530

OTHER SOURCE(S): MARPAT 121:102017

AB The comps. contain inclusion compd. of cyclodextrin and 1-[O-isopropyl-3-(3,3-dimethylbutoxy)benzohydroximoyl]-1H-1,2,4-triazole derivs. The comps. have potent insecticidal activities at low concns. for an extended period.

IC ICM A01N043-50  
 ICS A01N043-653; A01N055-00; C07D249-08

ICA C07D233-61

CC 5-4 (Agrochemical Bioregulators)  
 Section cross-reference(s): 28

ST benzohydroximoyltriazole **deriv** prepn insecticide

IT Agrochemical formulations  
 Insecticides  
 (inclusion compds. contg. cyclodextrins and triazole **derivs.** for)

IT 78-77-3, Isobutyl bromide  
 RL: BIOL (Biological study)  
 (condensation of, with triazole **deriv.** for insecticide prepn.)

IT 153719-95-0 153719-96-1 153719-97-2  
 153719-98-3 153719-99-4  
 RL: BIOL (Biological study)  
 (insecticidal formulation contg.)

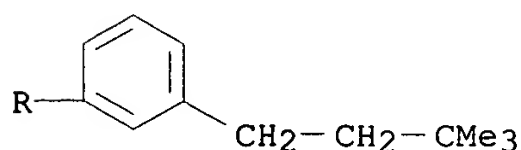
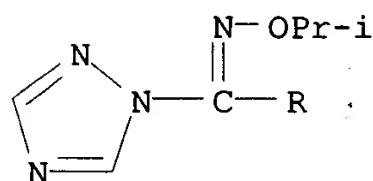
IT 153719-95-0 153719-96-1 153719-97-2  
 153719-98-3 153719-99-4  
 RL: BIOL (Biological study)  
 (insecticidal formulation contg.)

RN 153719-95-0 HCAPLUS

CN .beta.-Cyclodextrin, compd. with 1-[[3-(3,3-dimethylbutyl)phenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144802-36-8  
 CMF C18 H26 N4 O





CM 2

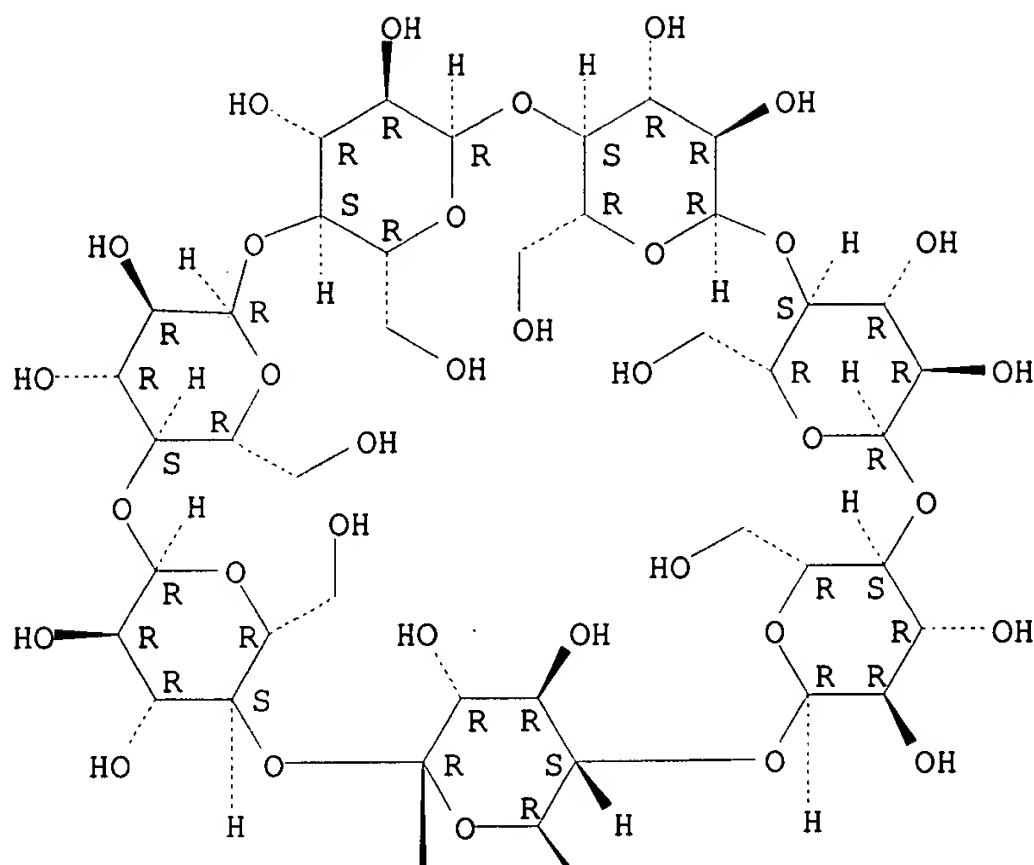
CRN 7585-39-9

CMF C42 H70 O35

CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

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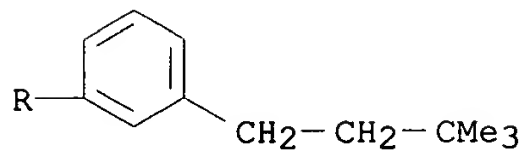
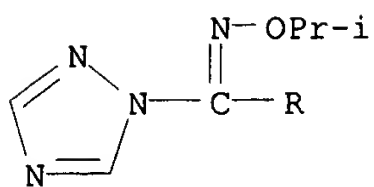
RN 153719-96-1 HCAPLUS

CN .alpha.-Cyclodextrin, compd. with 1-[[3-(3,3-dimethylbutyl)phenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144802-36-8

CMF C18 H26 N4 O



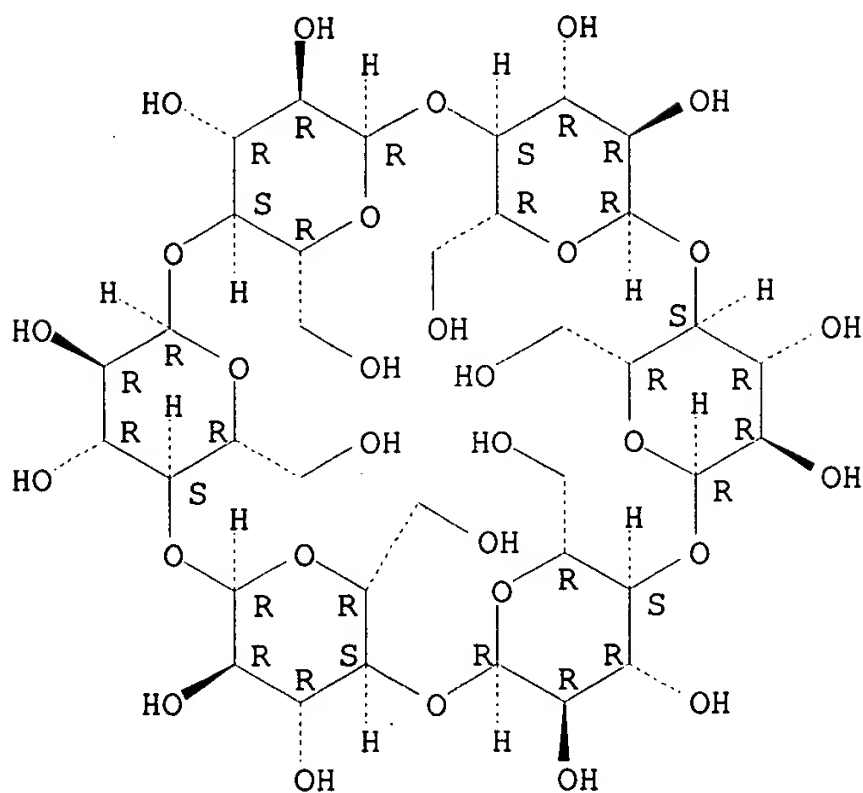
CM 2

CRN 10016-20-3

CMF C36 H60 O30

CDES 6:A-CYCLODEXTRIN

Absolute stereochemistry.



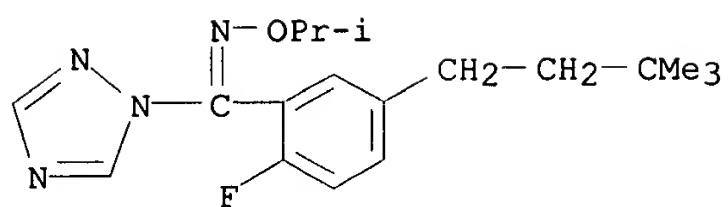
RN 153719-97-2 HCAPLUS

CN .beta.-Cyclodextrin, compd. with 1-[[5-(3,3-dimethylbutyl)-2-fluorophenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144802-69-7

CMF C18 H25 F N4 O



CM 2

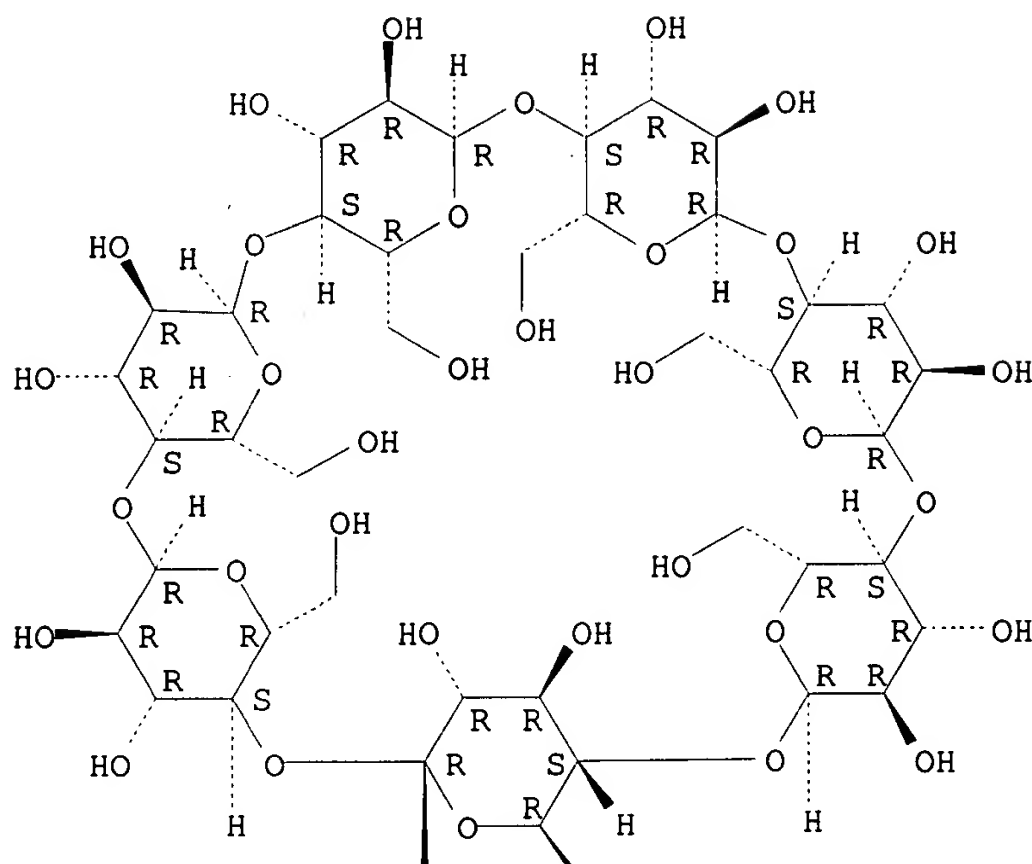
CRN 7585-39-9

CMF C42 H70 O35

CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

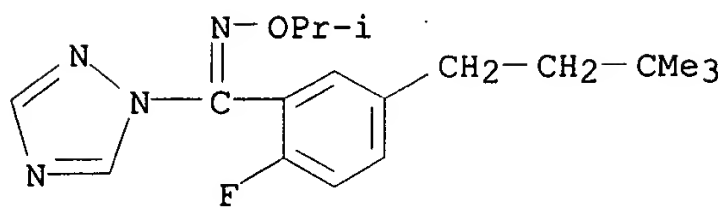


RN 153719-98-3 HCAPLUS

CN .gamma.-Cyclodextrin, compd. with 1-[[5-(3,3-dimethylbutyl)-2-fluorophenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

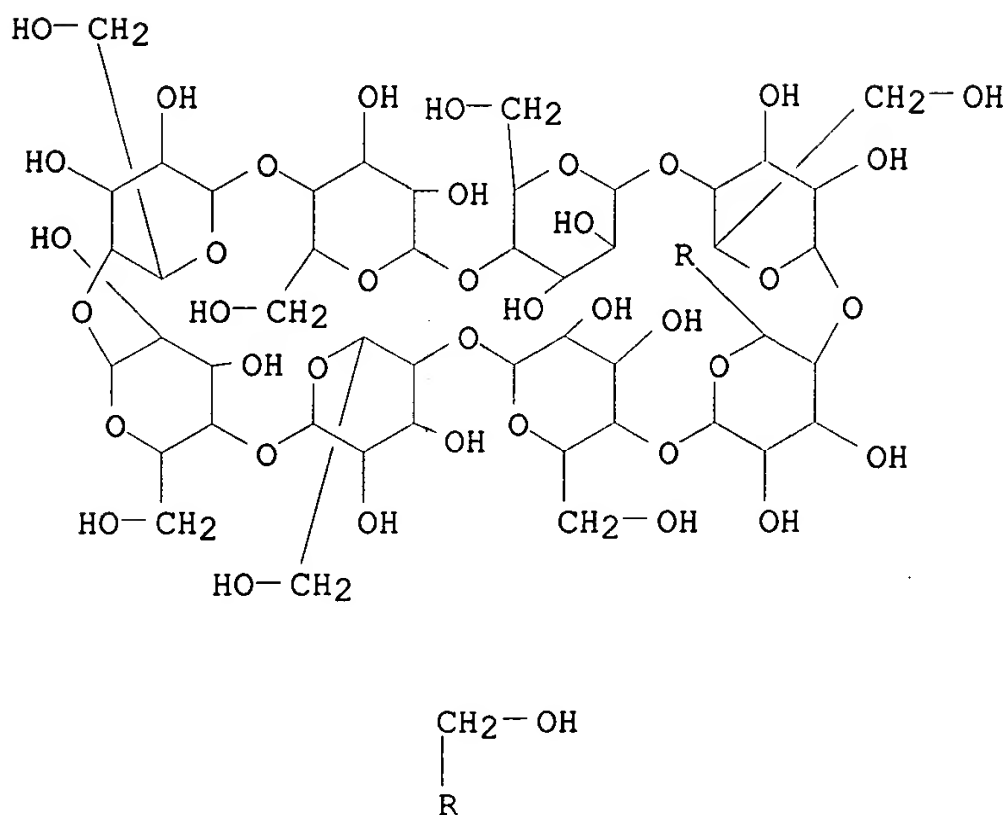
CM 1

CRN 144802-69-7  
CMF C18 H25 F N4 O



CM 2

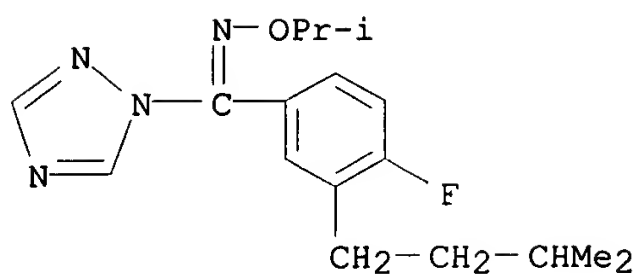
CRN 17465-86-0  
CMF C48 H80 O40  
CDES 6: GAMMA-CYCLODEXTRIN



RN 153719-99-4 HCAPLUS  
CN .beta.-Cyclodextrin, compd. with 1-[[4-fluoro-3-(3-methylbutyl)phenyl][(1-methylethoxy)imino]methyl]-1H-1,2,4-triazole (9CI) (CA INDEX NAME)

CM 1

CRN 144801-94-5  
CMF C17 H23 F N4 O



CM 2

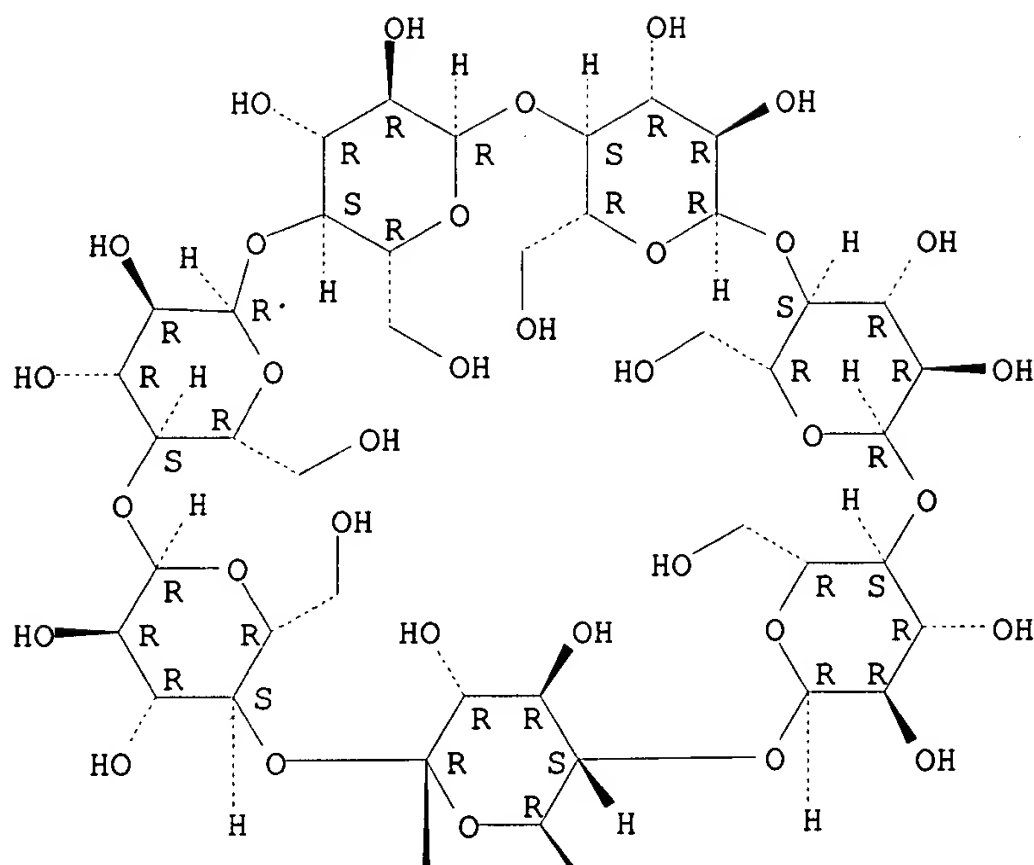
CRN 7585-39-9

CMF C42 H70 O35

CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A

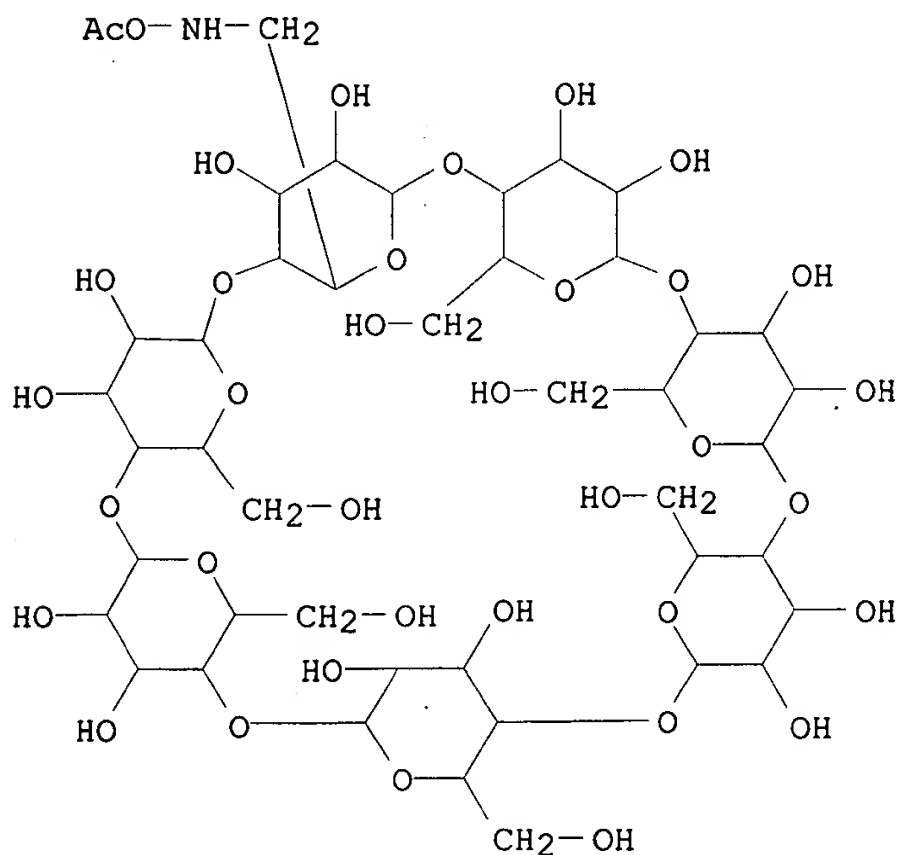


PAGE 2-A



L20 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1992:511918 HCAPLUS  
 DOCUMENT NUMBER: 117:111918

TITLE: Preassociating .alpha.-nucleophiles  
 AUTHOR(S): Fikes, Lewis E.; Winn, David T.; Sweger, Robert W.;  
 Johnson, Morgan P.; Czarnik, Anthony W.  
 CORPORATE SOURCE: Dep. Chem., Ohio State Univ., Columbus, OH, 43210, USA  
 SOURCE: J. Am. Chem. Soc. (1992), 114(4), 1493-5  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB .beta.-Cyclodextrin transacylase mimics were prepd. from  
 .beta.-cyclodextran-6-O-tosylate and NH<sub>2</sub>NH<sub>2</sub> or NH<sub>2</sub>OH.HCl. Both products  
 are readily acylated with p-AcOC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>, while the hydroxylamine deriv. is  
 also acylated by m-AcOC<sub>6</sub>H<sub>4</sub>CMe<sub>3</sub>.  
 CC 33-4 (Carbohydrates)  
 Section cross-reference(s): 22  
 IT **138435-34-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, kinetics of)  
 IT **138435-34-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, kinetics of)  
 RN 138435-34-4 HCAPLUS  
 CN .beta.-Cyclodextrin, 6A-[(acetyloxy)amino]-6A-deoxy- (9CI) (CA INDEX  
 NAME)



L20 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1992:429937 HCAPLUS  
 DOCUMENT NUMBER: 117:29937  
 TITLE: Composites of cyclodextrin nitrate esters for  
 propellants or explosives  
 INVENTOR(S): Consaga, John  
 PATENT ASSIGNEE(S): United States Dept. of the Navy, USA  
 SOURCE: U. S. Pat. Appl., 12 pp. Avail. NTIS Order No.  
 PAT-APPL-6-728 918.

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 728918	A0	19920215	US 1991-728918	19910708
US 5114506	A	19920519		

AB An energetic composite comprising (1) a solid nitrate ester of a cyclodextrin or a mixt. of cyclodextrins and (2) an energetic org. nitrate ester plasticizer such as 1,1,1-trimethylolethane trinitrate (TMETN) is useful in gun propellants or explosives. The cyclodextrin nitrate esters are useful as replacements for the less thermally stable and more impact sensitive nitrocellulose.

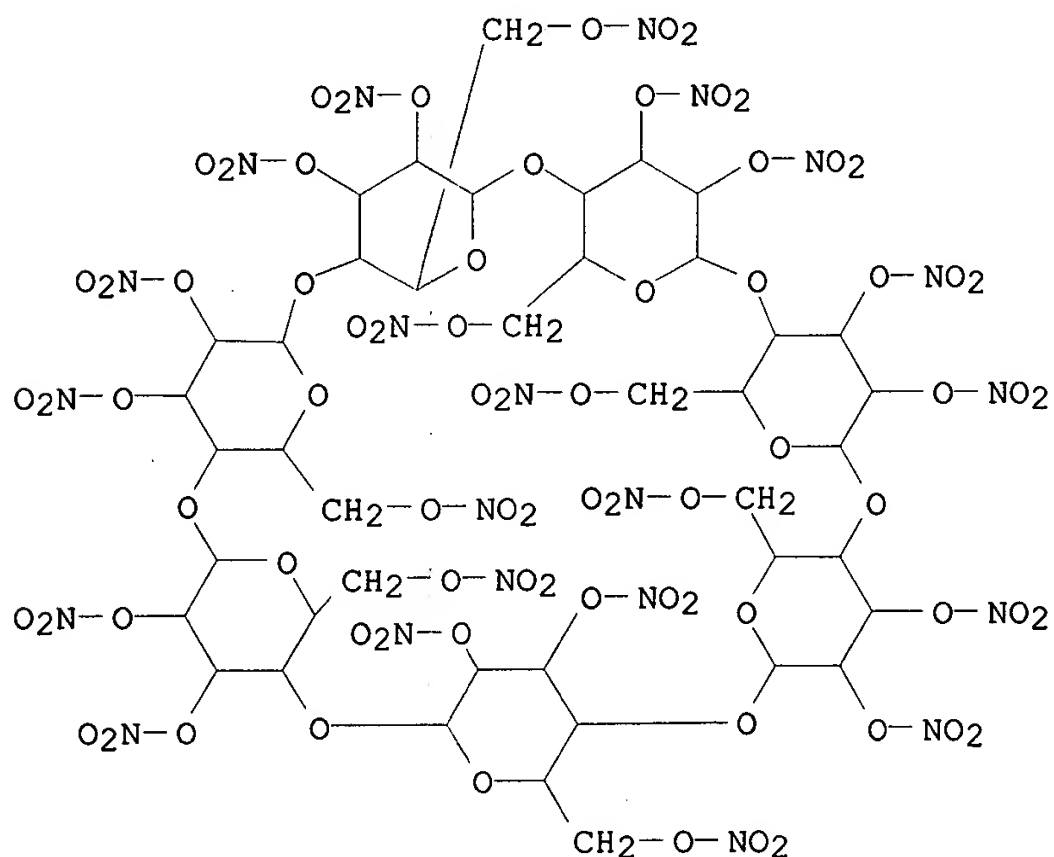
CC 50-1 (Propellants and Explosives)

IT **138223-83-3**  
 RL: USES (Uses)  
 (energetic composite contg. TMETN and, for gun propellants)

IT **138223-83-3**  
 RL: USES (Uses)  
 (energetic composite contg. TMETN and, for gun propellants)

RN 138223-83-3 HCAPLUS

CN .beta.-Cyclodextrin, heneicosanitate (9CI) (CA INDEX NAME)



L20 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:41871 HCAPLUS

DOCUMENT NUMBER: 116:41871

TITLE: Assignment of the proton, carbon-13, and nitrogen-15 resonances in cyclodextrin nitrates by 2D NMR and the determination of the regioselectivity of the hydroxylamine-induced denitration reactions

AUTHOR(S): Bulusu, S.; Axenrod, T.; Liang, B.; He, Y.; Yuan, L.  
 CORPORATE SOURCE: Dev. Eng. Cent., U. S. Army Armaments Res., Picatinny Arsenal, NJ, 07806-5000, USA  
 SOURCE: Magn. Reson. Chem. (1991), 29(10), 1018-23  
 CODEN: MRCHEG; ISSN: 0749-1581  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Hexakis(2,3,6-tri-O-nitro)-.alpha.-cyclodextrin and heptakis(2,3,6-tri-O-nitro)-.beta.-cyclodextrin were prepd. and the complete assignment of the <sup>1</sup>H, <sup>13</sup>C, and <sup>15</sup>N resonance signals in each case was achieved using homonuclear shift correlation expts., one-bond <sup>13</sup>C-<sup>1</sup>H and three-bond <sup>15</sup>N-O-C-<sup>1</sup>H heteronuclear shift correlation measurements. The denitration of these cyclodextrin nitrates by hydroxylamine in pyridine was investigated to study its selectivity in prepg. partially nitrated derivs. of these cyclodextrins. The sites of denitration were detd. in each case using <sup>13</sup>C and <sup>15</sup>N NMR and the products were completely characterized. The results indicate that denitration of these cyclodextrin nitrates is a highly regiospecific reaction occurring at the 2-position only and giving rise to hexakis(3,6-di-O-nitro)-.alpha.-cyclodextrin and heptakis(3,6-di-O-nitro)-.beta.-cyclodextrin, resp.

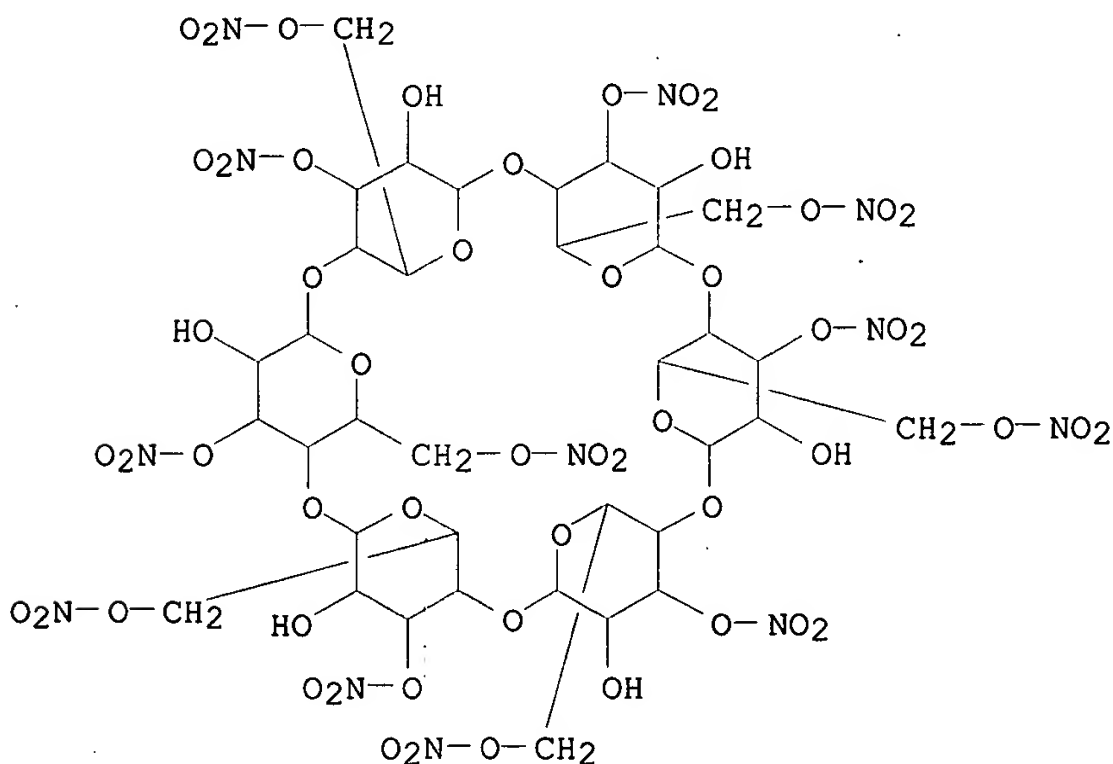
CC 33-4 (Carbohydrates)  
 Section cross-reference(s): 22

IT 138223-84-4P 138223-85-5P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and NMR spectra of, proton, carbon-13, and nitrogen-15)

IT 138223-82-2P 138223-83-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and regiospecific denitration of, with hydroxylamine, NMR in relation to)

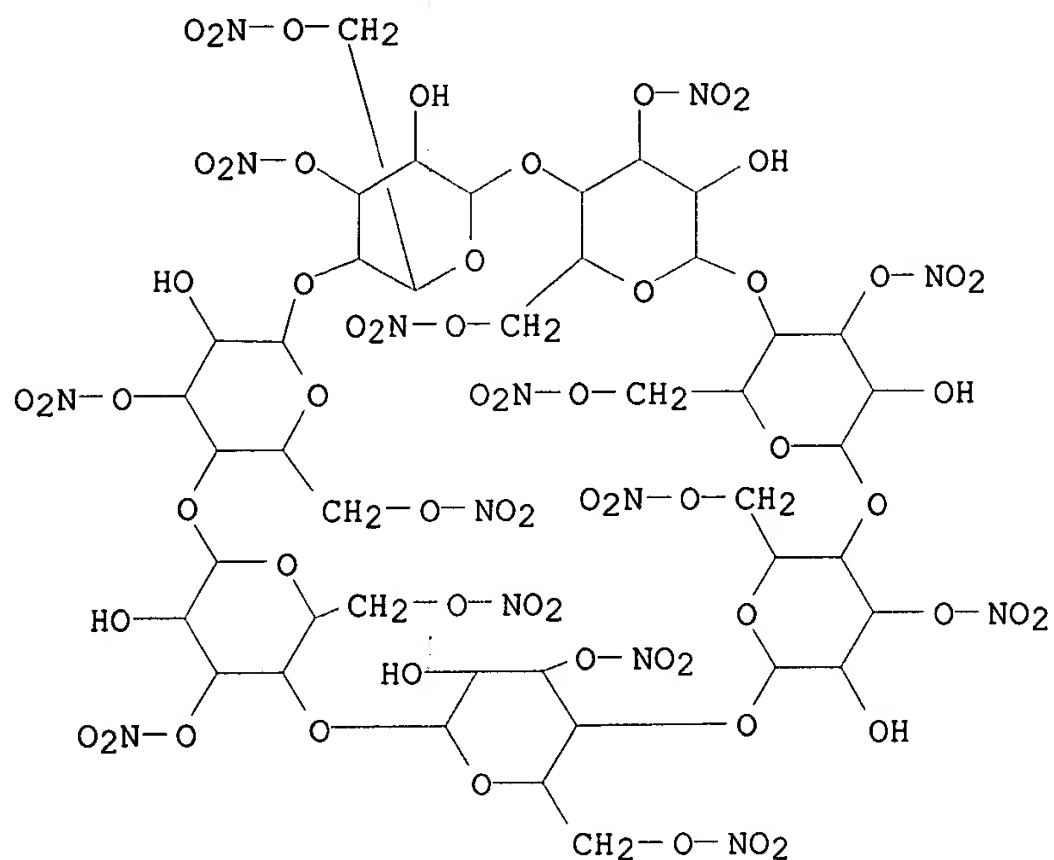
IT 138223-84-4P 138223-85-5P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and NMR spectra of, proton, carbon-13, and nitrogen-15)

RN 138223-84-4 HCAPLUS  
 CN .alpha.-Cyclodextrin, 3A, 3B, 3C, 3D, 3E, 3F, 6A, 6B, 6C, 6D, 6E, 6F-dodecanitrate  
 (9CI) (CA INDEX NAME)

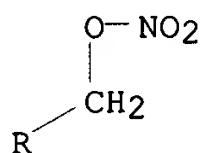
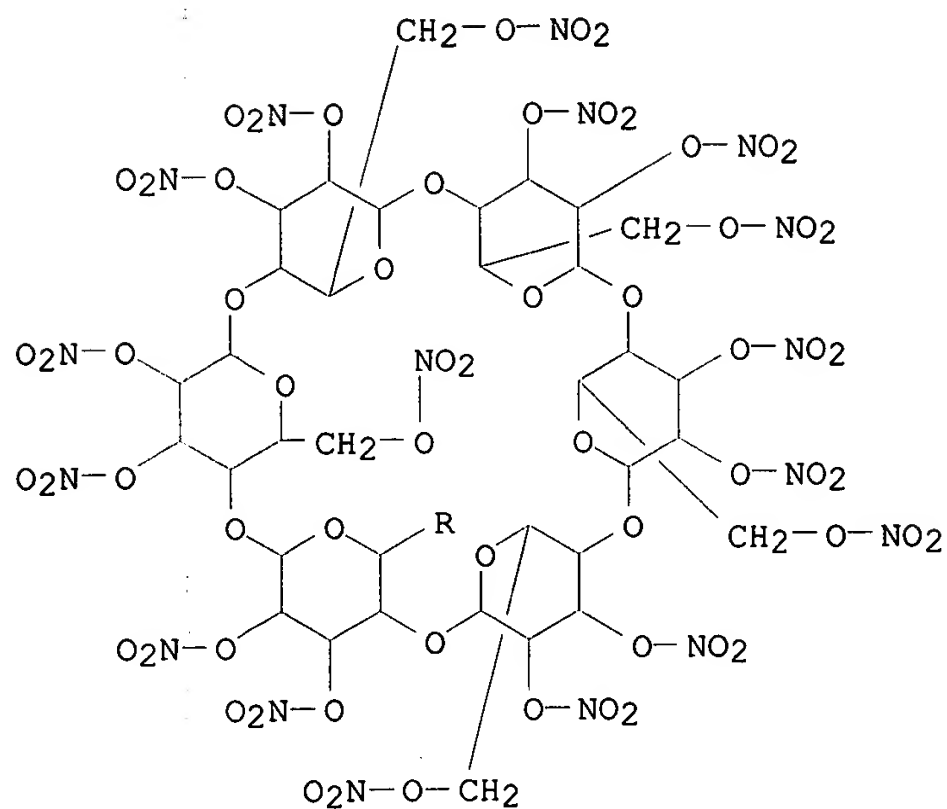




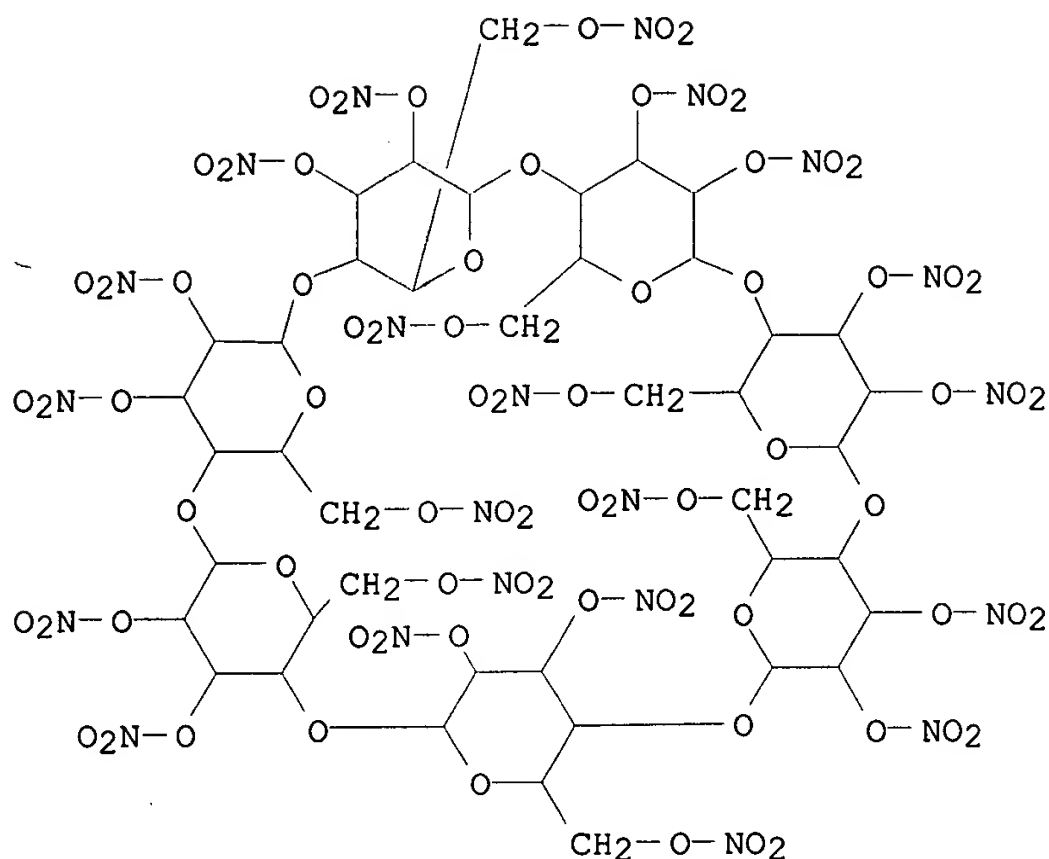
RN 138223-85-5 HCAPLUS  
 CN .beta.-Cyclodextrin, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 6A, 6B, 6C, 6D, 6E, 6F, 6G-tetradecanitate (9CI) (CA INDEX NAME)



IT 138223-82-2P 138223-83-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and regioselective denitration of, with hydroxylamine, NMR in  
 relation to)  
 RN 138223-82-2 HCAPLUS  
 CN .alpha.-Cyclodextrin, octadecanitate (9CI) (CA INDEX NAME)



RN 138223-83-3 HCAPLUS  
 CN .beta.-Cyclodextrin, heneicosanitate (9CI) (CA INDEX NAME)



L20 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:621768 HCAPLUS

DOCUMENT NUMBER: 115:221768

TITLE: .beta.-Cyclodextrin bound retrohydroxamate  
ferrioxamines. Chiral iron(III) coordination and  
biological activity of synthetic siderophores

AUTHOR(S): Akiyama, Masayasu; Katoh, Akira; Kato, Junichi;  
Takahashi, Keiko; Hattori, Kenjiro

CORPORATE SOURCE: Dep. Appl. Chem., Tokyo Univ. Agric. and Technol.,  
Tokyo, 184, Japan

SOURCE: Chem. Lett. (1991), (7), 1189-92

CODEN: CMLTAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal

LANGUAGE: English

AB R[NH(CH<sub>2</sub>)<sub>5</sub>((O)N(OH)(CH<sub>2</sub>)<sub>2</sub>C(O))<sub>3</sub>NHQ (HQ = .beta.-cyclodextrin; R = Ac,  
C(O)OCMe<sub>3</sub>) synthetic siderophores that mimic linear and cyclic  
desferrioxamines were prepd. These synthetic siderophores form stable 1:1  
Fe(III) complexes with a .DELTA.-selective coordination and show the  
growth promotion activity when tested with *Aureobacterium flavescens*.

CC 78-7 (Inorganic Chemicals and Reactions)

Section cross-reference(s): 10

IT **136429-46-4P 136429-48-6P**

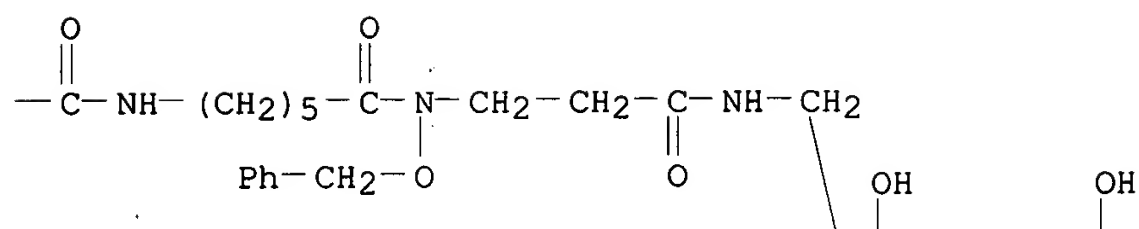
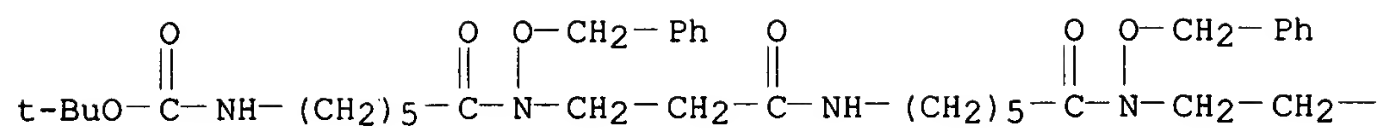
RL: RCT (Reactant); PREP (Preparation)  
(formation and hydrogenation of)

IT **136429-46-4P 136429-48-6P**

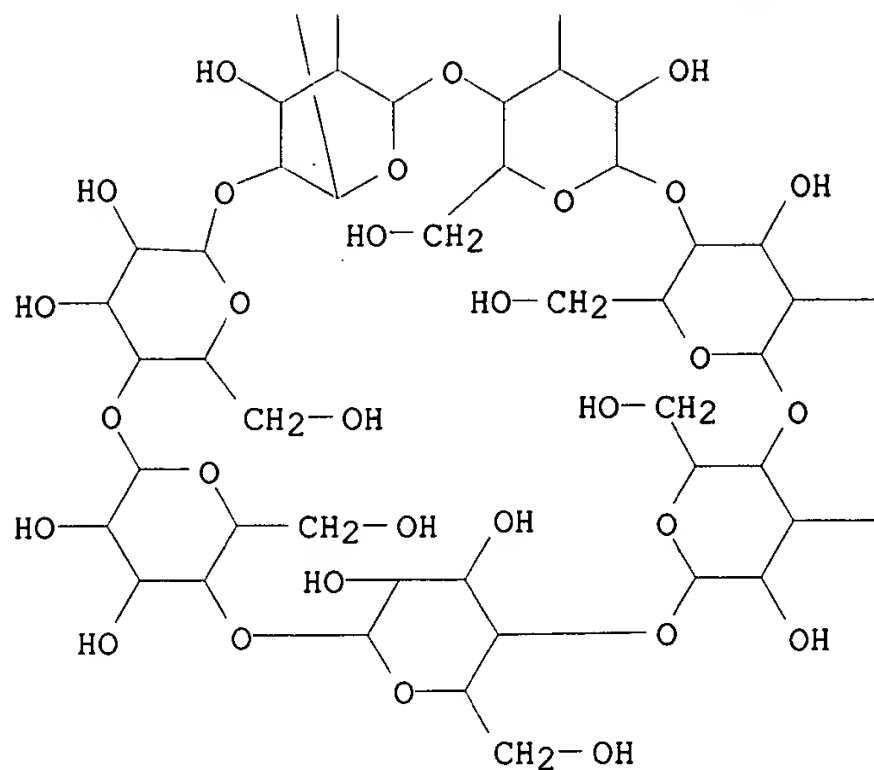
RL: RCT (Reactant); PREP (Preparation)  
(formation and hydrogenation of)

RN 136429-46-4 HCAPLUS

CN .beta.-Cyclodextrin, 6A-deoxy-6A-[[3-[[6-[[3-[[6-[[3-[[6-[[[(1,1-  
dimethylethoxy)carbonyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-  
oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-  
oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)



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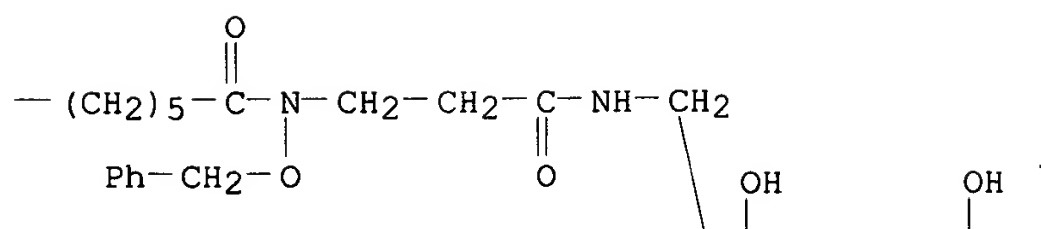
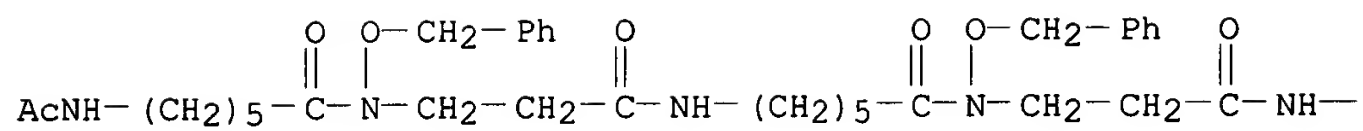


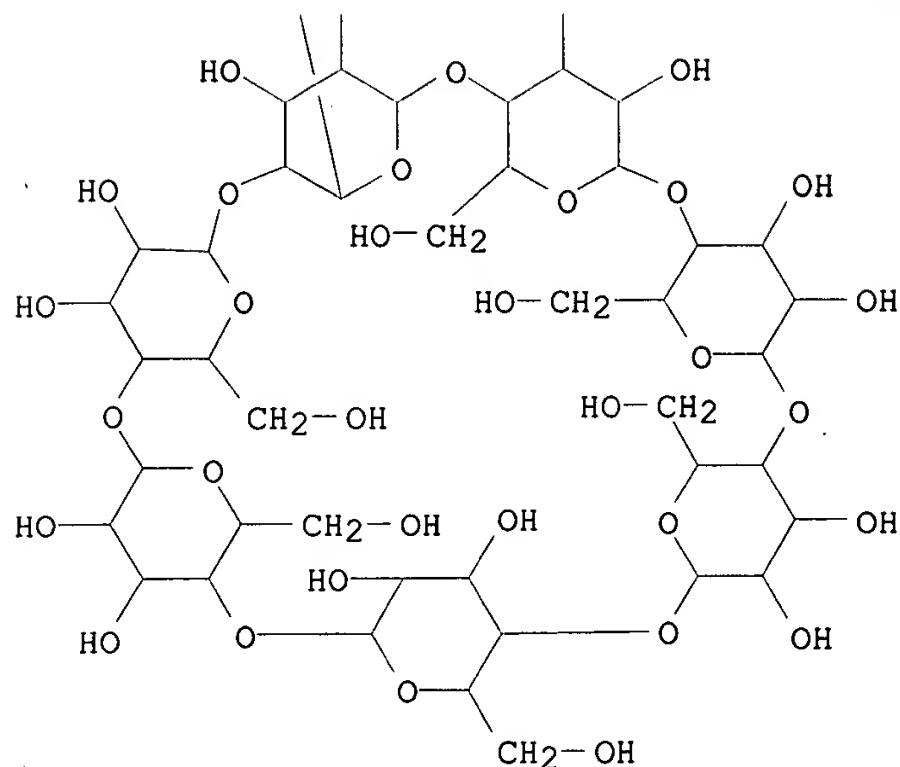
PAGE 2-C

— OH

— OH

RN 136429-48-6 HCAPLUS  
 CN .beta.-Cyclodextrin, 6A-[[3-[[6-[[3-[[6-[[3-[[6-(acetylamino)-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-1-oxohexyl](phenylmethoxy)amino]-1-oxopropyl]amino]-6A-deoxy- (9CI) (CA INDEX NAME)





L20 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:192366 HCAPLUS

DOCUMENT NUMBER: 114:192366

TITLE: Effect of diethyl .beta.-cyclodextrin on the release of nitroglycerin from formulations

AUTHOR(S): Umemura, Masashi; Ueda, Haruhisa; Tomono, Kazuo; Nagai, Tsuneji

CORPORATE SOURCE: Fac. Pharm. Sci., Hoshi Univ., Tokyo, 142, Japan

SOURCE: Drug Des. Delivery (1990), 6(4), 297-310

CODEN: DDDEEJ; ISSN: 0884-2884

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The complex-forming abilities of 2,6-di-O-ethyl-.beta.-cyclodextrin (DE-.beta.-CD), and its effect on the release of nitroglycerin (TNG) from formulations of the compd., were studied and compared with corresponding properties of .beta.-cyclodextrin (.beta.-CD) and 2,6-di-O-methyl-.beta.-cyclodextrin (DM-.beta.-CD). Complex formation was confirmed by DSC and IR absorption spectroscopy. In an accelerator test involving temp. and reduced pressure, marked depression of the volatility of TNG was obsd. as a result of CD complex formation. Dissoln. rats of TNG from powdery TNG/DE-.beta.-CD complex and its tablets were retarded in comparison with the rates from other CD complexes. The release rate of TNG from ointments was accelerated by complexation with DE-.beta.-CD, and retarded by complexation with .beta.-CD. To evaluate their in vivo percutaneous absorption, samples were applied to the inside tip of the cheek pouch of male golden hamsters. The amt. of TNG remaining in the cheek pouch was lowest in the case of the TNG/DE-.beta.-CD complex ointment, and relatively high in the case of the TNG/.beta.-CD complex ointment, in agreement with the in vitro results. The combination of DE-.beta.-CD complex and .beta.-CD complex might be applicable to sustained-release preps. for percutaneous administration.

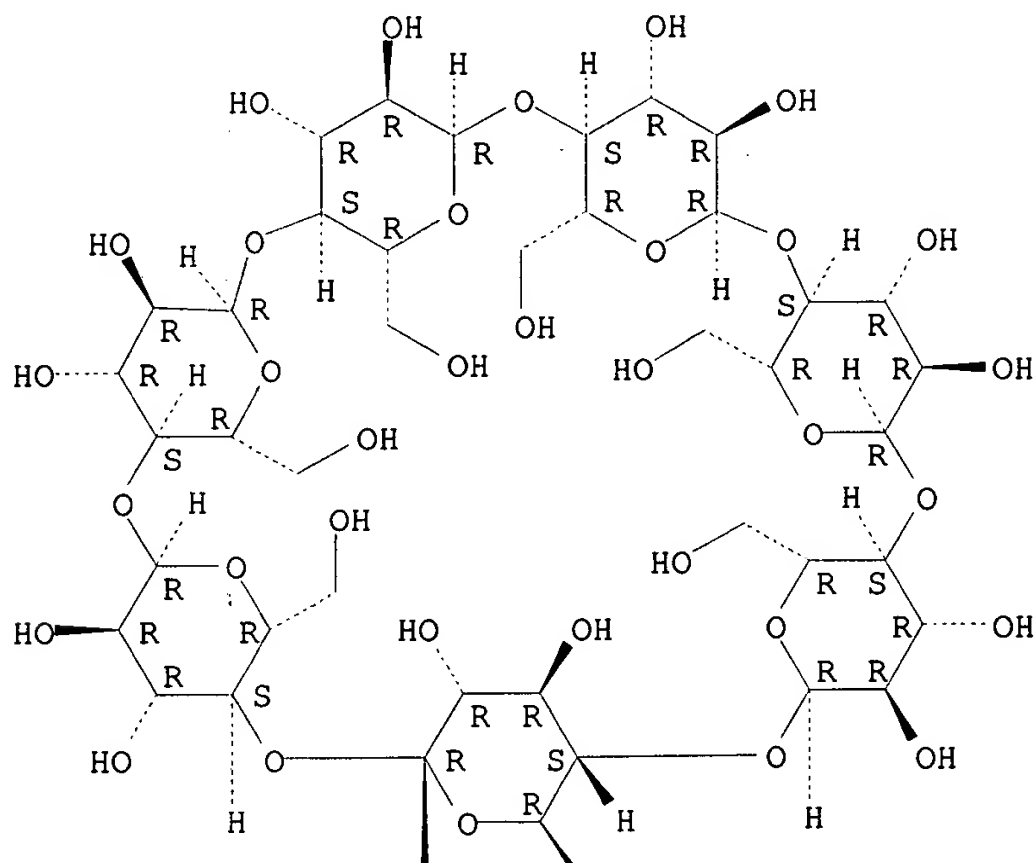
CC 63-5 (Pharmaceuticals)

ST nitroglycerin absorption release formulation; diethyl cyclodextrin  
nitroglycerin formulation; cyclodextrin deriv nitroglycerin

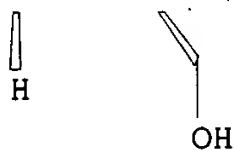
formulation  
 IT 69709-16-6, Nitroglycerin-.beta.-cyclodextrin complex (1:1)  
 133461-81-1 133485-38-8  
 RL: BIOL (Biological study)  
 (formation and drug absorption and release from buccal ointments and tablets contg.)  
 IT 69709-16-6, Nitroglycerin-.beta.-cyclodextrin complex (1:1)  
 133461-81-1 133485-38-8  
 RL: BIOL (Biological study)  
 (formation and drug absorption and release from buccal ointments and tablets contg.)  
 RN 69709-16-6 HCAPLUS  
 CN .beta.-Cyclodextrin, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 7585-39-9  
 CMF C42 H70 O35  
 CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



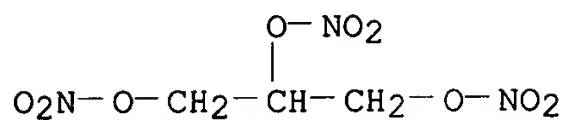
PAGE 2-A





CM 2

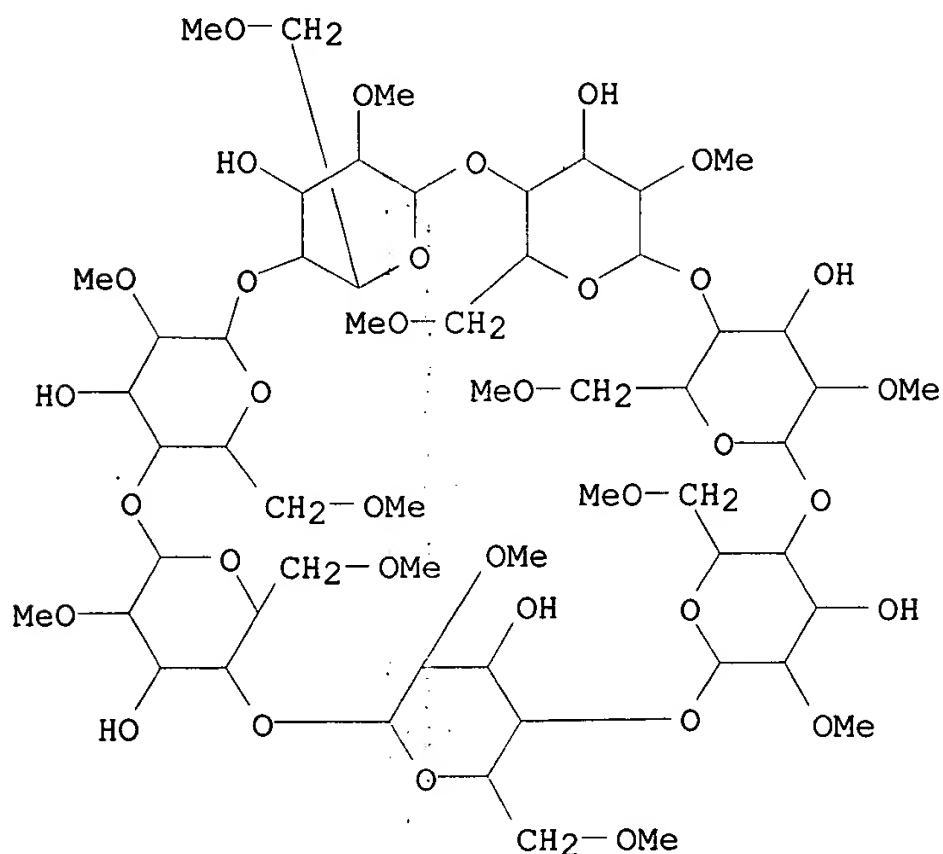
CRN 55-63-0  
CMF C3 H5 N3 O9



RN 133461-81-1 HCAPLUS  
CN .beta.-Cyclodextrin, 2A,2B,2C,2D,2E,2F,2G,6A,6B,6C,6D,6E,6F,6G-tetradeca-O-methyl-, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

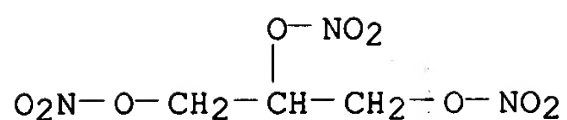
CM 1

CRN 51166-71-3  
CMF C56 H98 O35  
CDES 6:B-CYCLODEXTRIN



CM 2

CRN 55-63-0  
CMF C3 H5 N3 O9



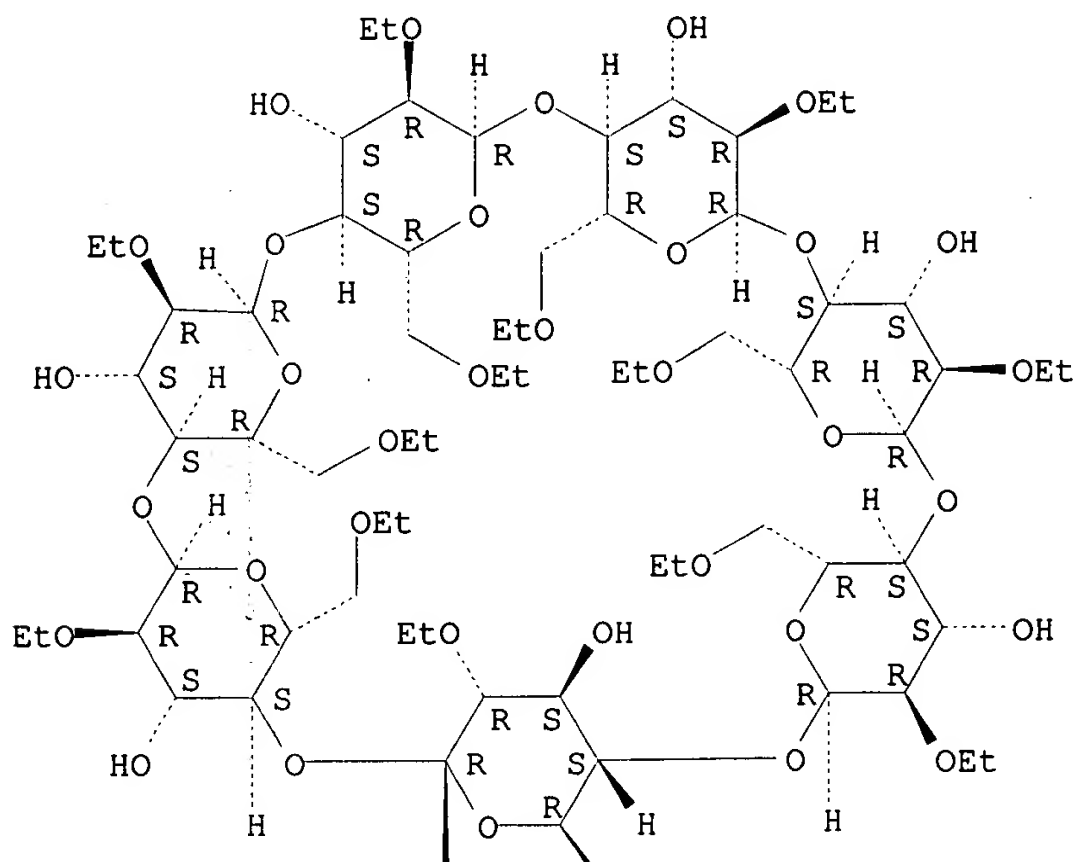
RN 133485-38-8 HCAPLUS  
 CN .beta.-Cyclodextrin, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 6A, 6B, 6C, 6D, 6E, 6F, 6G-tetradeca-O-ethyl-, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

CM 1

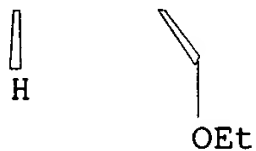
CRN 111689-03-3  
 CMF C70 H126 O35

Absolute stereochemistry.

PAGE 1-A

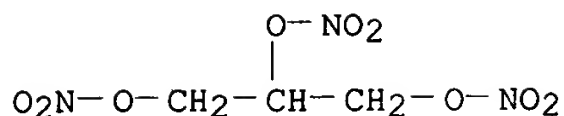


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CM 2

CRN 55-63-0  
 CMF C3 H5 N3 O9



L20 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:619185 HCAPLUS

DOCUMENT NUMBER: 111:219185

TITLE: Interaction of nitroglycerin with 6-O-.alpha.-maltosylcyclomaltoheptose

AUTHOR(S): Tomono, Kazuo; Gotoh, Hiroko; Okamura, Makoto; Saitoh, Taroh; Ueda, Haruhisa; Nagai, Tsuneji

CORPORATE SOURCE: Coll. Sci. Technol., Nihon Univ., Tokyo, 101, Japan

SOURCE: Carbohydr. Res. (1989), 192, 351-6

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The complexation of nitroglycerin (I) with 6-O-.alpha.-maltosyl-.beta.-cyclodextrin (G2-.beta.CD) in comparison with that of .beta.CD and other .beta.CD derivs. was studied. On complexation, 4 signals of I were shifted to higher field and 2 were shifted to lower field. The chem. shift data were similar for the I-G2-.beta.CD and I-.beta.CD systems, and suggest that I mol. was included partially in the cavity of G2-.beta.CD and .beta.CD. The volatility of I was decreased greatly on complexation and there was no significant difference between the complexes. I in all complexes degraded in alk. soln., the rat of degrdn. increasing in the series .beta.CD<G2-.beta.CD<di-Me .beta.CD<CD.

CC 63-5 (Pharmaceuticals)

ST nitroglycerin cyclodextrin **deriv** inclusion complexation;  
maltosylcyclomaltoheptose nitroglycerin inclusion complexationIT **69709-16-6P**, Nitroglycerin-.beta.-cyclodextrin inclusion complex  
(1:1) **123830-30-8P**RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and properties of)IT **69709-16-6P**, Nitroglycerin-.beta.-cyclodextrin inclusion complex  
(1:1) **123830-30-8P**RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and properties of)

RN 69709-16-6 HCAPLUS

CN .beta.-Cyclodextrin, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI)  
(CA INDEX NAME)

CM 1

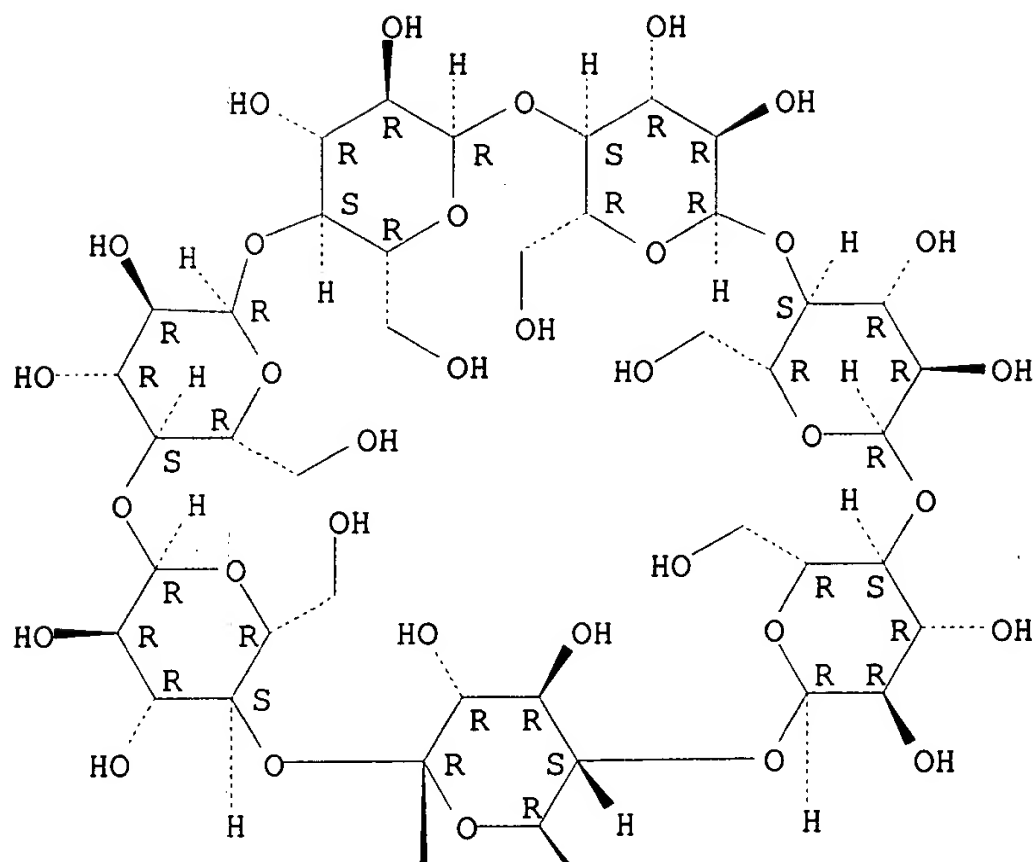
CRN 7585-39-9

CMF C42 H70 O35

CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



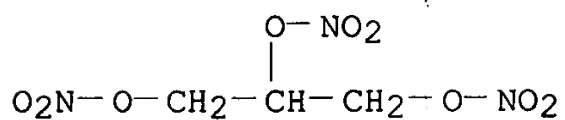
PAGE 2-A



CM 2

CRN 55-63-0

CMF C3 H5 N3 O9



RN 123830-30-8 HCAPLUS

CN .beta.-Cyclodextrin, O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-.alpha.-D-glucopyranosyl-(1.fwdarw.6A)-, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI) (CA INDEX NAME)

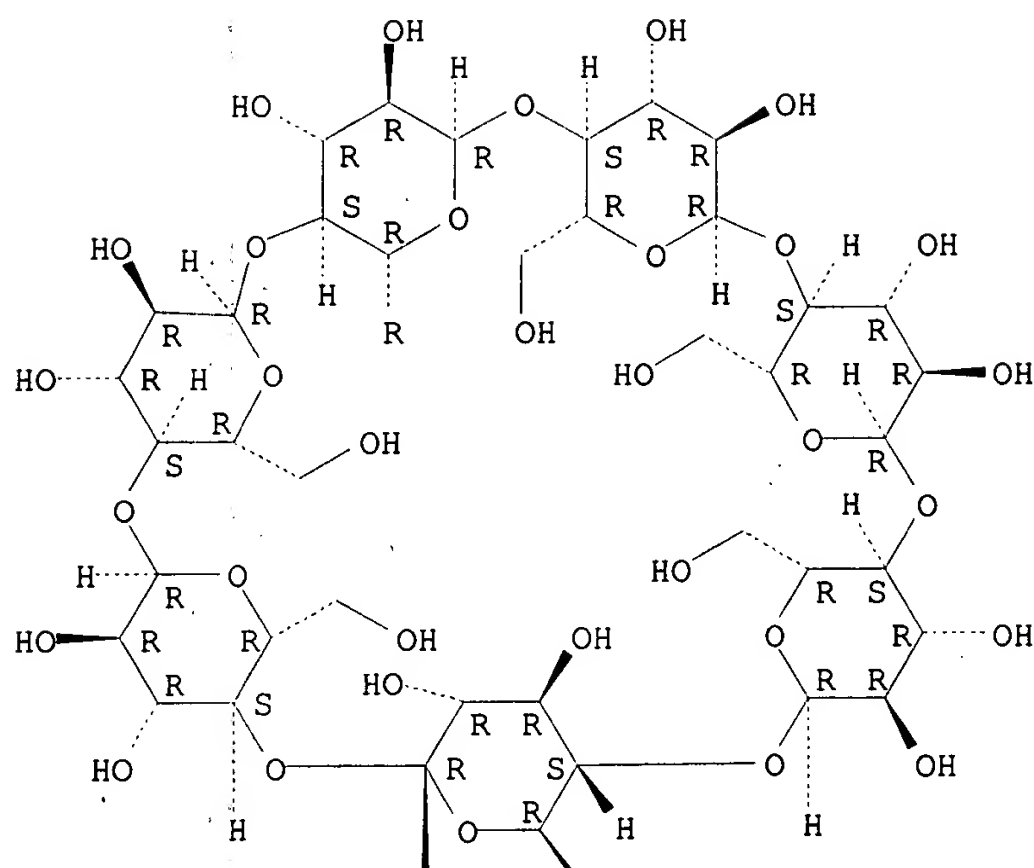
CM 1

CRN 104723-60-6

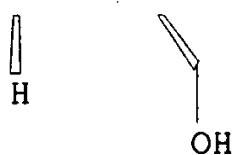
CMF C54 H90 O45

Absolute stereochemistry.

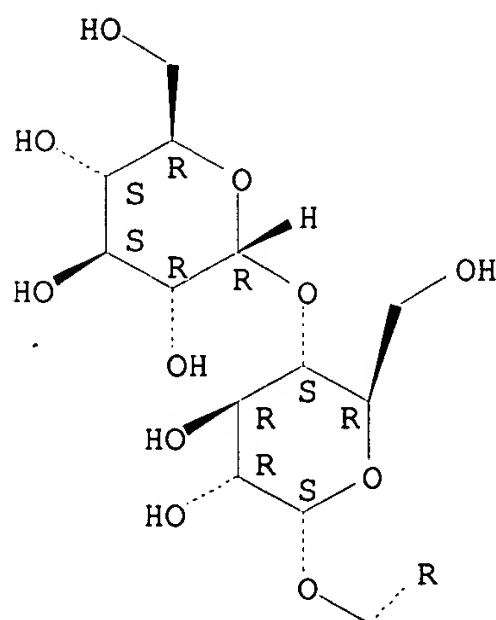
PAGE 1-A



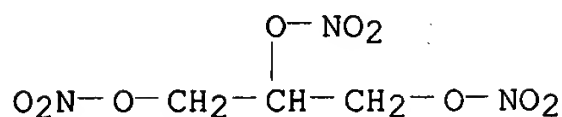
PAGE 2-A



PAGE 3-A



CM 2

CRN 55-63-0  
CMF C3 H5 N3 O9

L20 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1986:95468 HCAPLUS

DOCUMENT NUMBER: 104:95468

TITLE: Topical pharmaceuticals containing  
2-nitrooxymethyl-6-chloropyridine-.beta.-cyclodextrin  
inclusion compound

INVENTOR(S): Ueda, Yoshio; Shimojo, Fumio; Yoshida, Kiyoshige

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

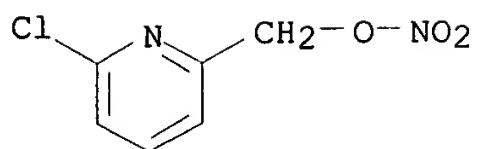
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 60156607	A2	19850816	JP 1984-12656	19840125
AB	Topical formulations contain 2-nitrooxymethyl-6-chloropyridine (I), or its .beta.-cyclodextrin inclusion compd., for treatment of blood vessel disorders. The bioavailability of I via transdermal administration is better than that via oral route. Thus, a Macrogol ointment contg. I-.beta.-cyclodextrin inclusion compd. (mol. ratio 1:1) was prepd.				
IC	ICM A61K009-06				
	ICS A61K031-44; A61K047-00; C07D213-61				
CC	63-6 (Pharmaceuticals)				
ST	pyridine nitrooxymethyl cyclodextrin pharmaceutical; cyclodextrin nitrooxymethylpyridine pharmaceutical; inclusion compd cyclodextrin pyridine deriv				
IT	98213-09-3 100509-03-3				
	RL: BIOL (Biological study)				
	(topical pharmaceuticals contg., for blood vessel disorder treatment)				
IT	98213-09-3 100509-03-3				
	RL: BIOL (Biological study)				
	(topical pharmaceuticals contg., for blood vessel disorder treatment)				
RN	98213-09-3 HCAPLUS				
CN	.beta.-Cyclodextrin, compd. with (6-chloro-2-pyridinyl)methyl nitrate (1:1) (9CI) (CA INDEX NAME)				

CM 1

CRN 90500-72-4  
CMF C6 H5 Cl N2 O3

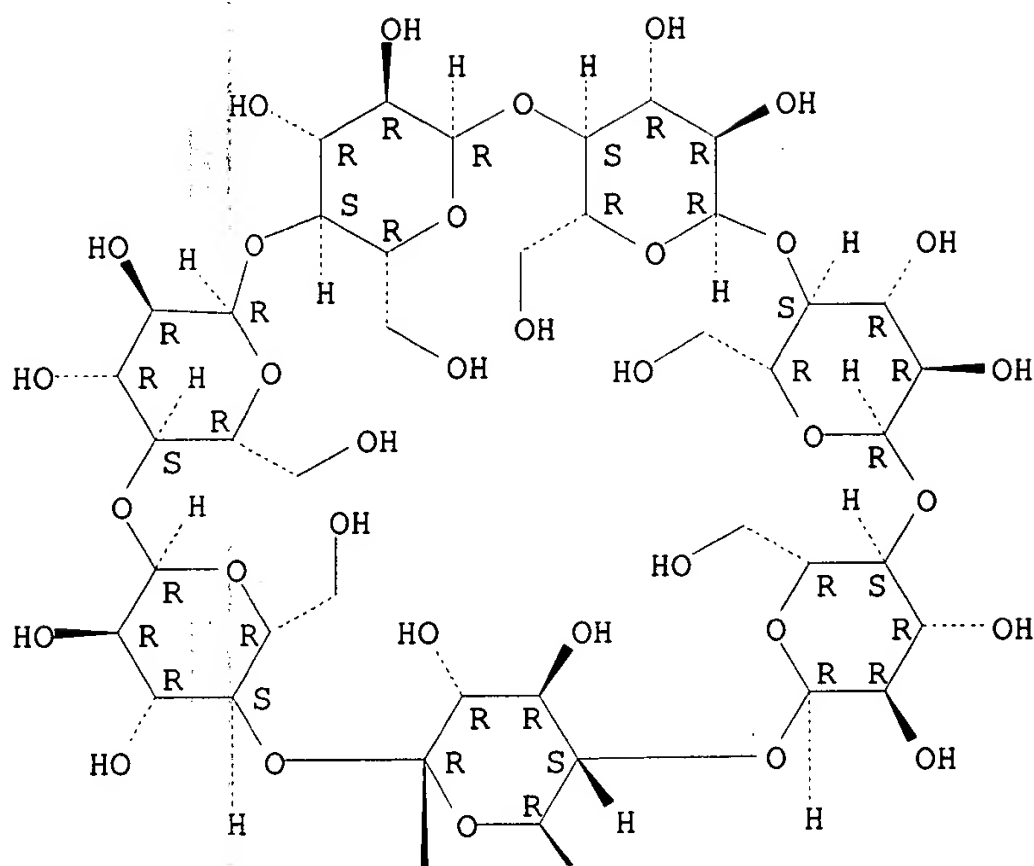


CM 2

CRN 7585-39-9  
CMF C42 H70 O35  
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

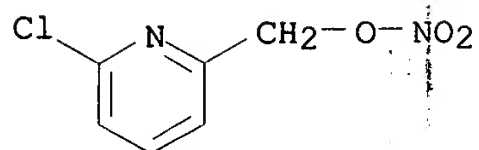


RN 100509-03-3 HCAPLUS  
CN .beta.-Cyclodextrin, compd. with (6-chloro-2-pyridinyl)methyl nitrate  
(1:3) (9CI) (CA INDEX NAME)

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CRN 90500-72-4

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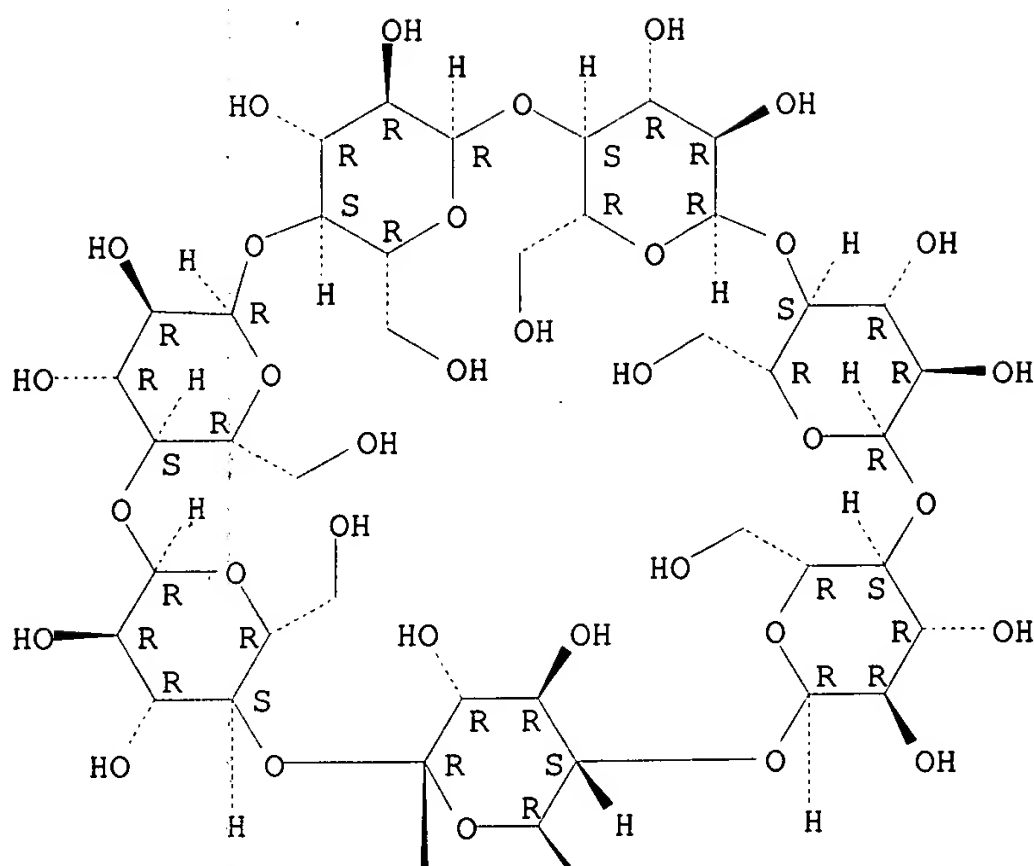


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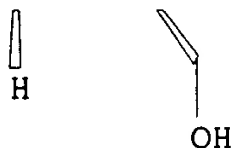
CRN 7585-39-9  
CMF C42 H70 O35  
CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



L20 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1985:506576 HCAPLUS  
DOCUMENT NUMBER: 103:106576  
TITLE: Electron microscopic study of cyclodextrin

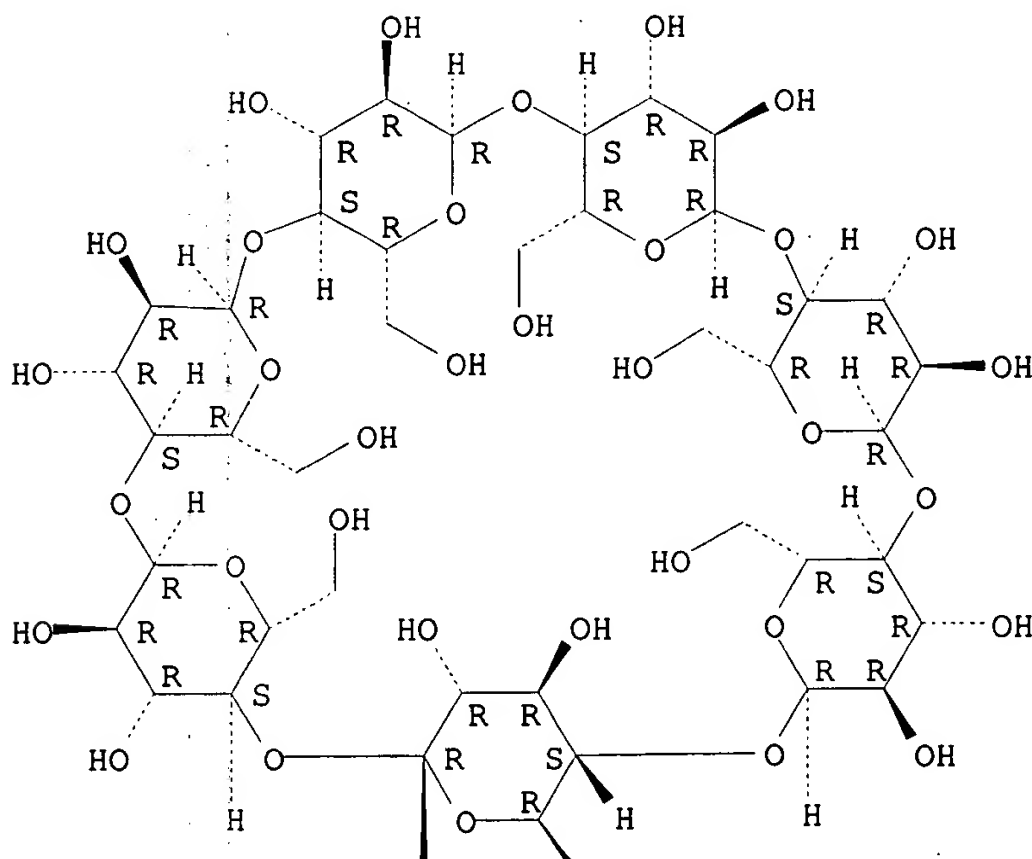


**derivatives**

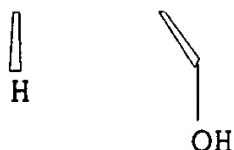
AUTHOR(S): Hodi, Klara; Kata, Michael  
 CORPORATE SOURCE: Dep. Pharm. Technol., Szeged Univ. Med. Sci., Szeged, H-6701, Hung.  
 SOURCE: Starch/Staerke (1985), 37(6), 205-8  
 CODEN: STARDD; ISSN: 0038-9056  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Electron microscopic investigations .alpha.- [10016-20-3], .beta.- [7585-39-9], and .gamma.-cyclodextrin [17465-86-0], di-Me .beta.-cyclodextrin [95176-10-6], crosslinked cyclodextrin (block polymer), and nitroglycerin-.beta.-cyclodextrin inclusion compd. [69709-16-6] are described.  
 CC 44-6 (Industrial Carbohydrates)  
 IT 7585-39-9 10016-20-3 12619-70-4D, polymers 17465-86-0  
 69709-16-6 95176-10-6  
 RL: PROC (Process)  
 (morphol. and electron microscopy of)  
 IT 69709-16-6  
 RL: PROC (Process)  
 (morphol. and electron microscopy of)  
 RN 69709-16-6 HCAPLUS  
 CN .beta.-Cyclodextrin, compd. with 1,2,3-propanetriyl trinitrate (1:1) (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 7585-39-9  
 CMF C42 H70 O35  
 CDES 6:B-CYCLODEXTRIN

Absolute stereochemistry.

PAGE 1-A



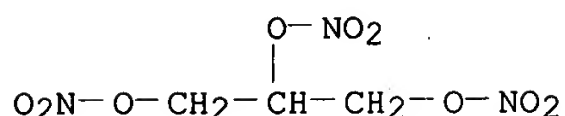
PAGE 2-A



CM 2

CRN 55-63-0

CMF C3 H5 N3 O9



L20 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1975:73336 HCAPLUS

DOCUMENT NUMBER: 82:73336

TITLE: .omega.-Aldehydo sugars prepared by ninhydrin oxidation

AUTHOR(S): Gibson, Alan R.; Melton, Laurence D.; Slessor, Keith N.

CORPORATE SOURCE: Dep. Chem., Simon Fraser Univ., Burnaby, B. C., Can.

SOURCE: Can. J. Chem. (1974), 52(23), 3905-12

CODEN: CJCHAG

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 6-Aldehydocyclohexa-amylose and 1,2:3,4-di-O-isopropylidene-.alpha.-D-galacto-hexodialdo-1,5-pyranose were prepd. by oxidative deamination of 6-amino-6-deoxycyclohexaamylose and 6-amino-6-deoxy-1,2:3,4-di-O-isopropylidene-.alpha.-D-galactopyranose, resp., using ninhydrin. The prepn. of the two aldehydes by the ninhydrin reaction is compared with the photolysis of the corresponding azido sugars. The mass spectra of the perdimethylsilyl derivs. of cyclohexaamylose and O-methyl oxime of 6-aldehydocyclohexaamylose were recorded.

CC 33-3 (Carbohydrates)

Section cross-reference(s): 22

IT 4711-01-7P 4933-77-1P 20581-77-5P 55018-87-6P 55018-88-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

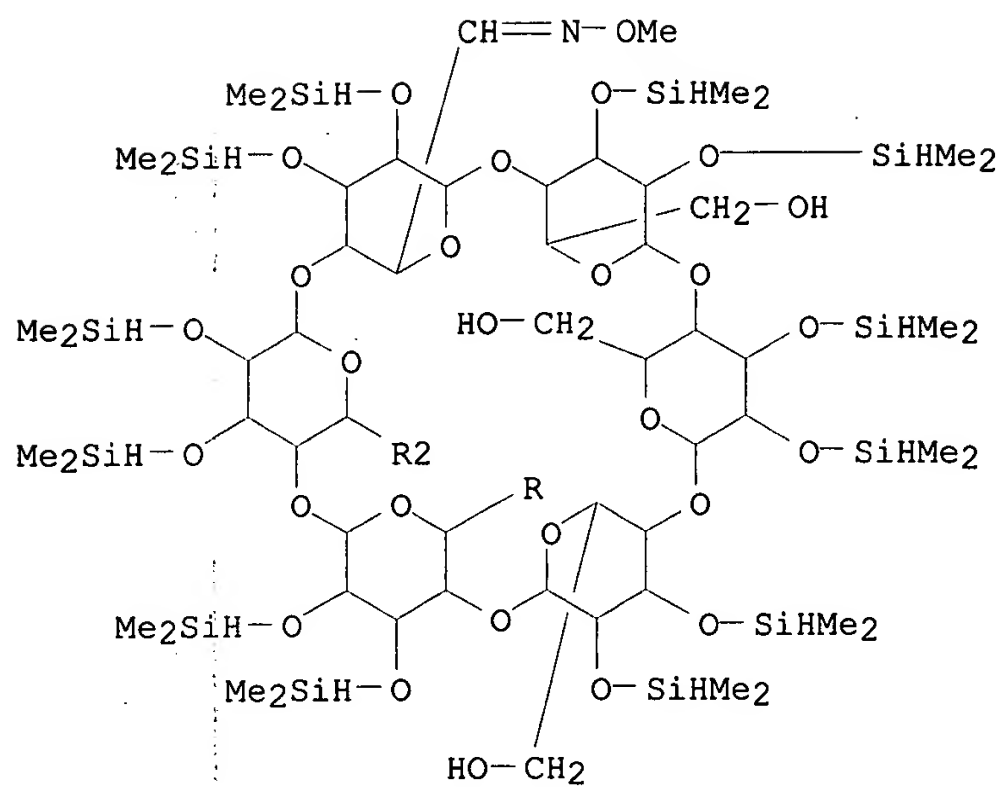
IT 55018-88-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

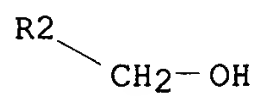
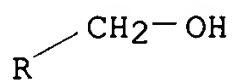
RN 55018-88-7 HCAPLUS

CN .alpha.-Cyclodextrin, 6A-deoxy-2A,2B,2C,2D,2E,2F,3A,3B,3C,3D,3E,3F-dodecakis-O-(dimethylsilyl)-6A-(methoxyimino)- (9CI) (CA INDEX NAME)

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=> fil wpids

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FILE 'WPIDS' ENTERED AT 13:29:19 ON 14 MAR 2002

L1 4481 S CYCLODEXTRIN? OR CYCLO (2W) DEXTRIN#  
L2 860 S ?AMINOXY? OR ?AMINO OXY?  
L3 2 S L1 AND L2  
L4 539 S ?AMINOXY? OR ?AMINO OXY?  
L5 2 S L1 AND L4

FILE 'WPIDS' ENTERED AT 13:32:49 ON 14 MAR 2002

=> d .wp 1-2

L5 ANSWER 1 OF 2 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD  
AN 1999-540817 [45] WPIDS  
DNC C1999-158030  
TI New **aminooxy-cyclodextrin** derivatives, useful as  
complexants, solubilizers, carbonyl reagents, catalysts or intermediates.  
DC A96 B04 B07 C03 C07 D21  
IN KHOMUTOV, A R; KHOMUTOV, R M; KORPELA, T; YAKOVLEV, D Y  
PA (KHOM-I) KHOMUTOV A R; (KHOM-I) KHOMUTOV R M; (KORP-I) KORPELA T; (YAKO-I)  
YAKOVLEV D Y  
CYC 84  
PI WO 9945032 A1 19990910 (199945)\* EN 36p  
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SL SZ UG ZW  
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD  
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZW  
AU 9926279 A 19990920 (200007)  
EP 1090041 A1 20010411 (200121) EN  
R: DE DK ES FI FR GB IT NL SE  
ADT WO 9945032 A1 WO 1999-FI167 19990304; AU 9926279 A AU 1999-26279 19990304;  
EP 1090041 A1 EP 1999-906292 19990304, WO 1999-FI167 19990304  
FDT AU 9926279 A Based on WO 9945032; EP 1090041 A1 Based on WO 9945032  
PRAI FI 1998-489 19980304  
AB WO 9945032 A UPAB: 19991103

NOVELTY - **Aminoxy-cyclodextrins** (I) are new. Also new are protected, oxime, nucleotide and nucleoside derivatives of (I).

DETAILED DESCRIPTION - **Aminoxy-cyclodextrins** of formula  $CD-(X-Y-ONH_2)_n$  (I) and their **aminoxy** protected derivatives (especially with ethoxy-ethylidene protected **aminoxy**) are new:

CD = mono- or polydeoxy alpha -, beta - or gamma - **cyclodextrin**, carrying the X-Y-ONH<sub>2</sub> group(s) in the 6-, 3- and/or 2-position(s) and optionally carrying further substituent(s) in the 6-, 3- and/or 2-position(s);

Y = linker group; and

X = functional group or atom necessary to connect Y and CD;

or X, Y = direct bonds;

n = 1-24 for alpha -**cyclodextrins**, 1-21 for beta -**cyclodextrins** or 1-18 for gamma -**cyclodextrins**.

INDEPENDENT CLAIMS are included for:

(a) novel oximes of (I) with synthetic or natural aldehydes or ketones (specifically acetone);

(b) derivatives of pyrimidine or purine nucleotides or nucleosides with **aminoxy-cyclodextrins** (not restricted to (I)), where the **aminoxy** group is linked to the heterocyclic ring, preferably through pyrimidine C-4 and purine C-6; and

(c) the preparation of (I).

USE - (I) can be used as complexants, solubilizers, carbonyl reagents (which may inhibit certain enzymes in the metabolism of cells), catalysts or starting materials for the synthesis of products to be used in pharmaceuticals, cosmetics, agriculture or in science laboratories. Typically (I) can be used for the preparation of stable oximes; immobilized on solid supports to give chromatographic materials; (in the case of polyfunctional (I)) reacted with dialdehydes or diketone to give polymers for use as semipermeable or stereospecific membranes or slow-release carriers; or used to prepare inclusion complexes (e.g. for stabilizing steroids, prostaglandins or vitamins) or for recovery of metal ions from solution.

ADVANTAGE - The oxime group is stable in aqueous solution, and allows a wide range of further conversions and applications. (I) are more stable than alkylamino-**cyclodextrin** analogs and can be prepared without using highly alkaline pH conditions.

Dwg.0/4

L5 ANSWER 2 OF 2 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD  
 AN 1990-069155 [10] WPIDS  
 DNC C1990-030273  
 TI Treating occlusive vascular diseases - using compsn. contg.  
 piperidiny-cyclopentyl 4-heptenoic acid deriv. and pentanoic acid deriv..  
 DC B03 C02  
 IN HUMPHREY, P P A; LUMLEY, P  
 PA (GLAXO) GLAXO GROUP LTD  
 CYC 12  
 PI EP 357465 A 19900307 (199010)\* EN 7p  
 R: AT BE CH DE FR GB IT LI NL SE  
 JP 02149521 A 19900608 (199029)  
 US 4968703 A 19901106 (199047)  
 ADT EP 357465 A EP 1989-309093 19890830; JP 02149521 A JP 1989-221878  
 19890830; US 4968703 A US 1989-379372 19890713  
 PRAI GB 1988-20578 19880831; GB 1986-19450 19860808  
 AB EP 357465 A UPAB: 19930928  
 Pharmaceutical compositions containing the thromboxane receptor blocker,  
 (1R-(alpha(Z),2beta,3beta,5alpha)) -(+)-7-(5-((1,1'-biphenyl)-4-yl)  
 methoxy)-3-hydroxy-2-(1-piperidiny) cyclopentyl)-4 heptenoic acid (Cpd.

A) or a salt, solvate or **cyclodextrin** complex thereof, acts synergistically with a thromboxane synthase inhibitor, (E)-5-(((5-(((3-pyridinyl) (3-(tri-fluoromethyl) phenyl) methylen) amino) oxy) pentanoic acid (Cpd. B).

USE/ADVANTAGE - Inhibition of blood platelet aggregation, and more specifically (1) treatment or prophylaxis of occlusive vascular diseases (claimed); (2) prophylaxis of cyclosporin A-induced nephrotoxicity (claimed); (3) treatment of asthma (claimed); (4) treatment of adult respiratory distress syndrome (claimed). In unit doses of 3.5 to 100 mg for Cpd. A and 5 to 500 mg for Cpd. B, administered 1 to 4 times daily, either simultaneously, sequentially or in combination. Cpd. A in combination with Cpd. B has a better biological profile of action, than the combination of Cpd. A and other thromboxane synthase inhibitors, such as dazoxiben or CV 4151 (as reported in EP-A-256805).

0/0